NASA

Headquarters

Training

Catalog

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A.
INTRODUCTION

Introduction

This NASA Headquarters catalog is designed to be a comprehensive listing of all educational and employee development programs sponsored by Headquarters. The Headquarters Training and Employee Development Team (also called here the "Headquarters Training Office") of the NASA Training and Development Division hopes that Headquarters employees will feel free to contact them or their Code's Training Coordinator (See Appendix JJ) for further information on the programs and courses listed in this catalog.

The programs described here have been carefully selected or specially developed in response to NASA-specific requirements. Although our experience indicates that past participants have derived substantial benefit and utility from these experiences, we consistently use participant comments and evolving operational requirements to improve and upgrade these programs and to anticipate the future needs of the agency. We invite your consideration of all of these offerings and your participation in those that best meet your needs.

The Headquarters Training Office looks forward to a number of exciting new programs in the upcoming year. Among these are:
• Supervisory Training Program
• Effective Negotiating Course
• Paradox/Harvard Graphics Computer Software Courses

Employees are encouraged to discuss specific course interests or ideas for new courses with their supervisor and with the Headquarters Training Office.

This catalog will be updated annually through the distribution of page changes as required.

Training Policy Overview

Definition

a. 'Training means the process of providing for and making available to an employee, and placing or enrolling the employee in a planned, prepared, and coordinated program, course, curriculum, subject, or routine of instruction or education, in scientific, professional, technical, mechanical, trade, clerical, fiscal, administrative, or other fields which are or will be directly related to the performance by the employee of official duties for the Government, in order to increase the knowledge, proficiency, ability, skill and qualifications of the employee in the performance of official duties.' (5 U.S.C. 4101, Chapter 41, p.113.)

b. **Employee/Career Development** is the process of and the activities associated with broadening employees' knowledge, skill and experience throughout their careers. This is accomplished through formal training, planned work-related developmental assignments including on-the-job training, rotational and understudy assignments, self-study, special assignments, and non-NASA work experiences.

c. **Organizational Development** refers to fundamental, purposeful changes in the processes of how individuals and the systems that support them interact to enhance the organizations performance, e.g. Strategic Planning and Total Quality Management (TQM) activities. Training supports the learning processes associated with developing organizations, or groups of individuals, where knowledge, practices and skills are provided to help organizational units improve their efficiency and effectiveness.

Policy

Consistent with Congressional expectations, NASA expects individual and organizational development activities to 'lead to (A) improved public service, (B) dollar savings [and] (C) the building and retention of a permanent cadre of skilled and efficient Government employees, well abreast of scientific, professional, technical and management developments both in and out of Government.' (P.L. 85-507, 72 Stat. 327.)

It is NASA policy to:

a. Use on-the-job-training through selected

work experiences as the primary method of developing the job-related knowledge, skills and abilities of employees.

b. Support systematic plans to broaden employees' knowledge and skills through planned work-related developmental assignments including on-the-job training, rotational and understudy assignments and non-NASA work experiences.

c. Use formal training and education experiences to complement work experiences.

d. Provide new supervisors with at least 40 hours of supervisory and management training within 6 months of the assignment; 80 hours within the first 2 years; advanced training for all supervisors and managers as needed; and continuing development and training for senior executives.

e. Provide employee and organizational development programs that will assure an appropriate balance of skills and experience to perform current and future Agency missions.

f. Encourage managers to consider training and/or other development activities for their employees that will increase their future value to NASA and not limit those activities to only development opportunities that are directly related to their current jobs. The objective is to give employees new tools and insight which will lead to better ways of delivering services, and improve work performance (FPM Bulletin No. 410-127, dated May 24, 1989).

g. Utilize foreign training for NASA employees only when it is fully justified by a requirement that cannot be met domestically or when there is a distinct advantage to the Agency. All foreign training requests regardless of how they are funded require special review and approval.

h. Permit participation in vendor promotional training so long as the subject matter covered does not include "coaching" in writing contract specifications, statements of work, source evaluation criteria, and related topics. Procurement officials are prohibited from accepting any vendor promotional training from competing contractors during the conduct of Agency procurement unless paid for by the Government or the training is solely to facilitate use of vendor's products furnished under an existing Government contract. Acceptance of travel expenses requires special review and approval. In no case shall a NASA employee accept travel expenses which are extravagant or excessive in nature.

i. Non-governmental personnel may attend NASA training provided no government trainees are displaced, attendance of private persons is limited, and training has been authorized, scheduled, and is necessary for government purposes. It may be permissible for contractor employees to attend sessions under these guidelines without directly reimbursing the agency if there can be some plausible cost/benefit justification to NASA for such attendance.

NASA-Sponsored Courses and Training

Training and Development Courses

This course catalog contains descriptions of the various courses available for qualified NASA Headquarters employees at the time of publication. Additional courses will be added through the periodic publication of catalog changes. Course descriptions are organized by curriculum area and include information on course content, objectives, target audience, prerequisites, length of course, approximate number of times the course is offered per year (see a "Schedule of Classes" for more specific information) and cost of the course (if any). Courses may be taught by NASA personnel, contractors working for NASA, or other Government agencies. Courses may be held at Headquarters, or other sites depending on class size, facilities available, and so on. (For information on the Management Education Center at Wallops Island, Virginia, see Appendix AA).

Employees who fail to attend a course for

which they are registered without notifying the Headquarters Training Office at least one day prior to the beginning of the course will not be permitted to enroll in a NASA-sponsored course for a 90-day period. Reserving a space in a class without attending prevents another employee from taking the class. If withdrawal from a course in unavoidable, please be sure to notify your immediate supervisor, your code's training coordinator, and the Headquarters Training Office.

Learning Resource Center

Located in Capital Gallery Room 750, the learning resource center has a wide variety of individualized learning materials available for employee use at no cost. Call Valerie Herwig at 453-8108 for more information.

Computer Training Center

The Computer Training Center (CTC), staffed by Future Enterprises Institute, offers a wide variety of computer courses. For information on registration and other policies, please see section J, "General Computer Skills."

The Computer Training Center will register students over the telephone (453-8108). A Computer Training Center Registration Form is then mailed to the student (See Appendix FF). This form contains information about the class on one side, and a registration form on the other side. The student should complete the registration form, making sure to obtain the signatures of their supervisor and their Code training contact. The form should be returned to the CTC at least three days before the class starts. The CTC registers NASA employees on a first come, first served basis. Contractors may register to take classes at the CTC, but are placed on a waiting list.

Attendance Policies

Students should plan to arrive 15 minutes before class. Students not present at the starting time are assumed to have withdrawn from the course, and wait-listed people are then invited to attend. Students who withdraw from

the class without notifying the CTC at least 24 hours in advance will cost their Code $100.00 in training funds. To avoid this charge, the student must send a written explanation, signed by their supervisor, to the CTC within 30 days of the missed class.

Other Information

The CTC is open to employee suggestions for new courses, or requests for classes by specific Codes. Call Valerie Herwig at 453-8108 to make arrangements.

CTC trainers provide follow-up support to students for 30 days after attending class. Call 453-8108 for phone consultations, or to make an appointment.

Computer-Based-Training is available during our office hours, 8:00-5:00. Please call 453-8108 to reserve a time.

Other Sources of Training

Training Conferences, Workshops, and Short Courses

Training conferences, workshops, and short courses can be identified either through the Headquarters Training Office, the Individual codes, or the employee. Once such a program is identified, the employee should complete NHQ Form 56: Request, Authorization, Agreement and Certification of Training, obtain the necessary signatures from management, and submit the Form 56 and registration information and costs to the Headquarters Training Office for approval. The Headquarters Training Office will enroll the employee in the course, and return a copy of the approved Form 56 and a course evaluation form to the employee.

In the case of some large training conferences or workshops attendance may be limited by a fixed allocation to the various codes. For these situations and others involving large numbers of NASA Headquarters employees, memorandum approval may be substituted for individual Form 56s in some instances.

Academic Courses

NASA supports job-related academic study by Headquarters employees (See "Approval of Training Requests" below). A Form 56 must be completed and approved for each individual course. A copy of the form may then be used in lieu of payment when registering for the course. The school will then request payment directly from NASA. For schools that do not accept payment by purchase order, the student should complete the NHQ Form 56, specifying in Box 11 that the school does not accept Government purchase orders, and request advance payment from the imprest fund. NASA will only pay for tuition and matriculation, registration, library, and laboratory fees related to an approved course. All other fees are the responsibility of the employee.

After completing the course, employees must submit a grade report to the Headquarters Training Office within 60 days of course completion. Employees earning less than a "C" grade may be required to reimburse NASA for the course tuition. Employees wishing to take more than six credit hours per semester must first obtain the approval of their Division Chief, who will certify that the employee should be able to fulfill work duties as well as course requirements. This statement should be submitted to the Headquarters Training Office along with the other training forms.

Training Request Procedure

Enrolling in a Class

To enroll in most training classes, first complete NHQ Form 56: Request, Authorization, Agreement and Certification of Training. Instructions for completing this form can be found in page in the "Preparing a NHQ Form 56" section of this catalog (page A-5).

The exceptions to the requirement for a NHQ Form 56 are:
- Computer training at the CTC (see "Computer Training" section).
- Some NASA-sponsored on-site training which

is clearly identified as an exception, and nomination of the employee is made by memorandum.

In these instances, a memorandum from the Headquarters Training office documenting attendance will be entered in the employee's official personnel record.

Approval of Training Requests

The decision to approve a training request rests with an employee's supervisor, their next level supervisor, and the Headquarters Training Office. Factors taken into consideration when approving a course are:

- If the training will likely improve the employee's job performance (including knowledge, skills, and altitude) in his or her present job, or a function closely related to a projected position.
- The employee's potential for advancement
- The employee's workload and the potential effect of the employee's absence on his or her office.
- The employee's developmental goals
- Prior self-development
- Previous training accomplishments
- The employee's ability to pass the training on to colleagues
- Competitiveness of the vendor's registration/tuition fee.
- Headquarter's priorities for type of training.

Fulfilling degree requirements is not an appropriate justification for approval. Generally, a request for non-Government training will not be approved if you have less than one year of continuous Government service.

Reimbursement of Travel Expenses Associated with Training

Travel funds spent during training should be reflected on the training request. Funding for such training is the responsibility of the employee's code. Even though travel cannot be paid for with training funds, travel expenditures should still be indicated on the Request for Training form in block 18B. Contact your training coordinator for more information on

reimbursement for travel expenses associated with training.

Submission Deadlines

Requests for off-site training should be submitted to the Headquarters Training and Employee Development Office at least 30 days before the start of the class.

Cancellations, Withdrawals, and No Shows

Cancellations, withdrawals, and no shows should be avoided whenever possible in order to reduce course cost increases. Employees wishing to withdraw from a class after the class begins must obtain a written withdrawal request with the approval of the employee's Division Director and the Headquarters Training Office. Approval will be granted only in emergencies or when work-related duties prohibit completion of the course.

According to HQMI 3410.1: "The cost of the course is deducted from the training budget of the employee's office when notice of withdraw is not received in writing before the course starting date."

In off-site programs where a "drop dead" date for the final day of withdrawal is announced by the vendor, the cost of the course will be deducted from the training budget of the employee's office when notice of withdrawal is not received before the "drop dead" date.

Employee's Agreement to Continue in Service

Employees who enroll in a non-Government training course at Government expense must agree to continue their employment at NASA following the completion of the training for a period equal to three times the length of the training. Employees who resign or transfer to another Federal agency during this obligatory period of employment must inform the Headquarters Training and Employee Development Office 10 days before their last day of employment at NASA. The employee may be expected to repay the training costs. For details on this agreement, please see page

two of NHQ Form 56.

Preparing a NHQ Form 56

One of the first steps an employee interested in training must take is the completion of a NHQ Form 56, Request, Authorization, Agreement and Certification of Training (See Appendix BB). It is necessary to obtain the approval of one's supervisor, next level supervisor, training coordinator, and Chief, Headquarters Training and Development before the Form 56 can be processed. The completed form must be submitted to the Headquarters Training Office at least 10 working days before the registration date.

When completing a Form 56, please note the following instructions:

- In Block 12, unless the requested training is through another government agency, employees must have had at least one year of prior federal service to be eligible for training. This restriction may be waived if the employee's supervisor attaches to the Form 56 a memorandum explaining why this training is needed and how NASA will benefit from it.
- In Block 17, employees must clearly demonstrate that the requested training is related to their job and will likely improve their work performance.
- Block 28 is signed by the employee's Code's training contact, and submitted to the Headquarters Training Office.

Once the Form is completed and sent to the Headquarters Training Office, it will be reviewed by a Employee Development Specialist/ Assistant and forwarded to the Headquarters Training Officer for approval or disapproval. Copies of the Approved Form 56 will be returned to the Code training coordinators as soon as possible. As soon as possible before the course begins, confirmation letters will be sent to each applicant by the Code training coordinator.

Funding Sources

There are three basic funding sources used for NASA Headquarters training and employee development:
- Headquarters Training and Employee Development funds (General Activities).
- Training allocations given to the individual codes (Code Allocated Funds).
- Agency-wide funds (Agency).

Courses listed in the catalog generally state the source of funding for the respective programs.

Preparation of an Individual Development Plan

The Headquarters Training Office highly recommends that an Individual Development Plan (IDP) be completed for each Headquarters employee. In some programs (i.e., Continuing Education Program, etc.) an IDP will be required for participation.

An IDP is an outline created by the employee and his or her supervisor which serves as a guide to developing the employee's career through a carefully planned sequence of training (See Appendix II). IDPs are useful for employees at all levels, new or established, seeking to move into new career paths or simply expecting to maintain current job knowledges and skills. Topics to consider, when writing an IDP, are:
- What are my job-related strengths and weaknesses?
- How will training improve my current work performance?
- What skills and abilities are essential for my job? How can I improve them?
- What work do I wish to be doing in one year? In five years?
- What are my office's needs, program plans, and mission statement?
- What is the best way to get the training and development I need?
- What training specifics do I need to consider? Appropriate topics are course locations, titles, dates, and cost; desired rotational assignments; on-the-job activities; and attendance at seminars and conferences.
- IDPs generally plan training for one to two years at a time.

CURRICULUM AREA

B.
GRADUATE ACADEMIC STUDY
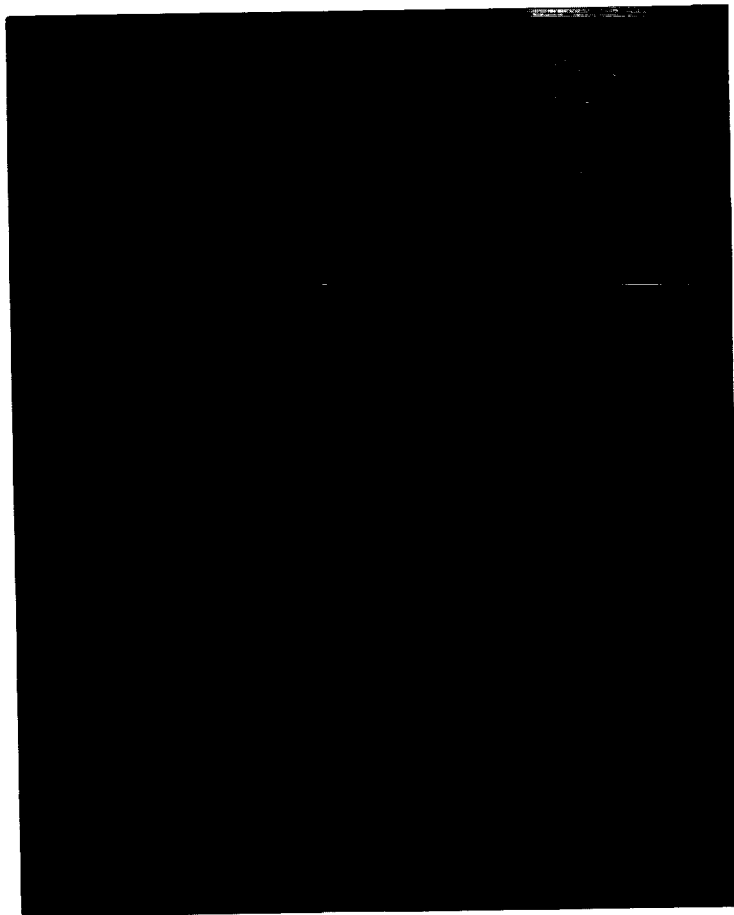
Graduate Academic Study

Their are three basic programs of NASA sponsorship for graduate academic study:

1. Course-by-course approval: Code allocated money is used to fund graduate academic study on a course-by-course basis for individuals (similar to any off-site, non-government training).

2. Graduate Study Program: Headquarters Training and Development money is used to fund a program of academic study (see HQMI 3410.2A) while the individual still performs their NASA Headquarters work functions. Participants in this program may be granted official work time (with supervisory approval) to devote to academic study at approved universities in the Washington metropolitan area. The remaining work hours per week will be at the employee's regular duties. For more information, see the "Graduate Study Program" section.

3. University Fellowship Programs.

Agency funded, competitive programs for advanced study at Congess and selected universities.

Graduate Study Program

Description: Sponsorship under this program is generally limited to those fields of study which relate directly to an applicant's job at NASA Headquarters, are relevant to Headquarters' needs and will enhance a participant's ability to contribute to NASA Headquarters. NASA Headquarters will pay salary, tuition, laboratory fees, student union or activity fees, registration fees, and course related textbook costs. Employees selected must agree to remain with NASA following completion of training for a

period equal to three times the number of course hours spent in academic work. It is expected that employees will register for at least six semester hour credits for the fall and spring terms and at least three semester hour credits for the summer term.

Criteria for selection: Training must be in fields which can be shown to be related to the performance of official duties by the employee being trained. The proposed field of study must provide benefits which are relevant to present and to future/projected NASA Headquarters needs.

To be considered for the NASA program, applicants must have been accepted in a graduate program by an approved university located in the Washington metropolitan area, and have submitted to the Employee Development Office an academic program outline signed by the appropriate university advisor.

Participants will be nominated to the Headquarters Training Office not later than June 15 of each year. Recommendations will be made by a Graduate Study Review Panel composed of senior management officials and established by the Chief, Headquarters Training and Development. Selections will be made by the Director, Training and Development Division.

University Fellowship Programs

Curriculum

NASA participates in various education programs provided by other organizations. These are primarily academically-based programs from universities such as MIT, Stanford, Harvard, Simmons and Penn State. Some programs allow for the opportunity to design educational curricula around individual interests and responsibilities. Participants are selected on a very competitive basis for 15 - 20 of these programs each year. The intent of these programs is to provide an intensive study of management and executive processes. With

...the limited resources available to support these programs, it is important that those nominated and selected be individuals who have demonstrated the potential to manage at the senior levels of the agency.

Nomination/Registration Process

Nominations are processed by each field installation and forwarded to the appropriate Institutional Associate Administrator. [Nominations from all Headquarters offices should be forwarded through the Headquarters Training Office, Code FTH. Form 1591, or a computer-generated equivalent, should be used for all fellowships.]

Since the reviewing and screening process will be based on the information submitted, care should be taken to ensure that each candidate's nomination includes all requested information in the required 12 copies, as well as the appropriate endorsements and that the objectives for participation are stated in specific and concise language.

At Headquarters nominations will be recommended by a University Fellowship Program Panel composed of senior management officials and established by the Chief, Headquarters Training and Development Division. Nominations will be forwarded to the Director, Training and Development Division for Agency competition with the Executive Development Education Panel.

Consistent with our determination to realize the largest return on our investment in these costly programs, the Executive Development Education Panel tends to give increased attention to Reentry Plans (item 28 on NASA form 1591, Nomination for NASA Development Programs). Therefore, we are asking nominating officials to be as precise and informative as possible in describing the ways in which nominees would be utilized after acquiring the skills and knowledge to be expected from the programs.

Mutual Obligations of NASA and Fellowship Nominees

Prior to nomination, candidates should be informed of the requirements of the program which they are considering, including the extent of NASA support. Fellowship candidates should be informed of the requirement to sign 'continued service agreement' as a condition of their selection. Candidates should understand the program objectives and, where appropriate, discussions should include possible job assignments upon completion of the program. NASA participants in the longer programs will be invited to an orientation to help them maximize the value of the fellowship experience. It will include information on transitions to and from academia, study techniques, representing NASA to outsiders, as well as residential and transportation tips.

Nominees who are selected for long-term development programs should understand that their performance appraisal will continue under the sponsoring organization's system and that the back-home manager will determine the performance rating. The performance plan must be based on the objectives and requirements of the developmental program and evaluations conducted in the program will provide a major input into the performance assessment process.

In addition to full tuition support, it is Agency policy to provide assistance in funding transportation and residential costs consistent with government travel regulations and Agency policies on extended temporary duty. The participant should be aware, however, that the Government does not reimburse out-of-pocket expenses to the same extent as normally occurs in the private sector.

Carnegie-Mellon University Senior Executive Seminar

Description: NASA supports a maximum of four senior-level executives in this annual three-week residential program at the School of Urban and Public Affairs, Carnegie-Mellon University, Pittsburgh, Pennsylvania. The program is designed to help participants gain understanding of the political and economic processes that shape policy and of potential impacts of political, social, economic and technological changes; to improve participants'

grasp of management concepts and analytical techniques for more efficient planning, coordination and control; to foster insight about human behavior in organizations; and to develop more effective, flexible leadership skills.

Objectives:
- Approximately six hours of lecture/classroom activity each day; a blend of academic, hands-on, anecdotal coursework.
- Topics include a wide range of managerial practices including negotiation skills, strategic planning, the 'excellent' leader, performance review and evaluation, the national and international economic environment, media relations and crisis management.
- Instructors from the university with additional presentations by consultants and practitioners.

Who Should Attend?: Senior-level professional career NASA employees, typically at the GS/GM-15 or SES level, who would benefit from exposure to general management theory with an emphasis on productivity and strategic planning.

Prerequisite: None.

Length of Course: Three weeks.

Frequency: Held each year in the early summer.

Cost: Agency funded.

Contact: Deborah Corsini
School of Urban and Public Affairs
Carnegie-Mellon University
(412) 268-6082

Congressional Fellowship Program

Description: NASA provides one participant per year for this ten-month program for federal executives. It is designed to provide a thorough understanding of Congressional operations and a perspective on national objectives and Executive Branch operations.

Who Should Attend?: GS/GM-15 and SES members, usually from Headquarters. Candidates should have ten to fifteen years of professional experience and their jobs should require extensive Congressional operations.

Objectives:
- A comprehensive orientation program on the Legislative Branch followed by weekly seminars.
- Developmental work assignments are provided in Congressional offices and/or committee staffs.

Prerequisite: None.

Length of Course: Ten months.

Frequency: Once per year.

Cost: Agency funded.

Contact: American Political Science Association
(202) 483-2512

George M. Low Memorial Engineering Fellowship

Description: NASA provides one participant each year for this academic-year-long program of engineering graduate study specifically related to the participant's career goals and anticipated post-study NASA assignments. This study can be done at any accredited graduate school acceptable to both NASA and the National Space Club. This fellowship was designed to honor the late Deputy Administrator of NASA, Dr. George M. Low, by providing employees of proven ability and outstanding potential with the opportunity to undertake concentrated studies of long-range engineering problems and to increase their capabilities in NASA-oriented disciplines.

Who Should Attend?: Participants should have five to 15 years of work experience and

college study in NASA-relevant areas of engineering.

Objectives:
- This is a highly individualized program of study/research; the participant designs her/his own program.

- The program provides for up to a maximum of $10,000 from NASA and $2,000 from the National Space Club for tuition, travel and extended per diem at the chosen location, p plus incidental expenses for up to one year.

- Nominees are selected on the basis of the proposed plan of study/research and the anticipated benefit to the Agency and the individual.

Prerequisite: None.

Length of Course: Academic year.

Frequency: Once per year.

Cost: Agency funded.

Contact: Marcia Nickols
Office of Human Resources and Education, Training and Development
NASA
(202) 453-8692

Harvard University Mid-career Master In Public Administration

Description: NASA provides one participant annually for this academic year-long program in Public Administration at the John F. Kennedy School of Government, Harvard University, Cambridge, Massachusetts. This program for experienced public service professionals is designed to strengthen participants' policy analysis and management skills, preparing them to assume positions of greater leadership and responsibility.

Who Should Attend?: Mid-career professionals who are motivated to become

leaders in their fields. They are expected to contribute to meeting society's needs for excellence in government.

Objectives:
- Participants design study plans to strengthen their skills.
- Focuses on the broadest problems and highest level of responsibility.
- Emphasizes effective operations within legal, political and civil service constraints.
- Stresses successful negotiations and consensus building among diverse groups around substantive policy areas.

Prerequisite: None.

Length of Course: Ten months.

Frequency: Once per year.

Cost: Agency funded.

Contact: Sue Williamson
John F. Kennedy School of Government
Harvard University
(617) 496-1100

Harvard University Program for Management Development (PMD)

Description: NASA provides one participant for each of the two 12-week sessions, one in the spring and one in the fall, at the Graduate School of Business Administration, Harvard University, Boston, Massachusetts. The program emphasizes fundamental management skills and techniques designed to meet the needs of highly successful middle managers who are considered to be in the 'first half' of their careers.

Who Should Attend?: Participants should have had ten to 15 years of highly successful professional experience. Typically they have advanced rapidly within a single function and are expected to move into positions of higher general management responsibility.

Objectives:

- Training in modern management skills, techniques, processes and concepts. Content includes functional management, quantitative controls and systems, utilization of human resources, economic and social aspects of business decisions and business policy.
- Helps participants understand the vital interrelationships of their current specialties to other specialized functions.
- Stresses interrelationships among business, Government and the public interest. Through study of corporate strategy, participant outlooks should be broadened.

Prerequisite: None.

Length of Course: Twelve weeks.

Frequency: One in the spring (February through April); and one in the fall (September through November).

Cost: Agency funded.

Contact: Nancy Vena
Graduate School of Business Administration
Harvard University
(617) 495-6486

Harvard University Program for Senior Executives in National and International Security

Description: NASA provides two participants for this two-week program offered in late summer at the John F. Kennedy School of Government, Harvard University, Cambridge, Massachusetts. The program provides senior officials with the opportunity to consider issues of national security with a broad spectrum of peers and enhances their ability to work effectively and constructively with people whose orientations may differ from their own.

Who Should Attend?: This program is designed for flag and general rank officers from

the armed services and civilians of comparable levels from Defense, State, OMB and other organizations concerned with foreign affairs and national security, including the intelligence community, committees of Congress, and the private sector. Typically, participants are executives who make or influence strategic decisions within their organizations or are called upon to implement major policies.

Objectives:

- Emphasizes the importance of how one thinks; not simply what one knows.
- Designed to help people whose personal decisions and/or recommendations can critically affect the political, economic or military interests of the United States.

Prerequisite: None.

Length of Course: Two weeks.

Frequency: One two-week program conducted late August through early September.

Cost: Agency funded.

Contact: Helen Clougherty
John F. Kennedy School of Government
Harvard University
(617) 495-1332

Harvard University Senior Executive Fellows (SEF)

Description: NASA provides one or two participants for the fall eight-week program at the John F. Kennedy School of Government, Cambridge, Massachusetts. The program is designed to broaden senior executives' perspectives on their roles and opportunities as public managers. It is intended to help meet the Federal Government's need for a highly trained and motivated corps of executives to effectively implement Government policies and programs.

Who Should Attend?: Upper-level managers (GM14 - SES) of demonstrated

accomplishment who are now setting strategy, evaluating program choices and managing relationships with the external political environment. Participants should have the skills required for leadership in the development of public policies and programs in complex situations.

Objectives:
• Strengthens conceptual and analytical skills in policy and program design and builds administrative skills in the management and leadership of public organizations.
• Focuses on managerial practices, the managerial environment and policy analysis.
• In addition to the core curriculum, participants may elect to spend up to one-quarter of their time participating in classes and activities throughout the university.

Prerequisite: None.

Length of Course: Eight weeks.

Frequency: One session conducted late September through mid-November.

Cost: Agency funded.

Contact: Elizabeth Nill or Tina Gross
John F. Kennedy School of Government
Harvard University
(617) 495-1165

Harvard University Senior Managers in Government

Description: NASA provides one or two participants per year for this three-week program at the John F. Kennedy School of Government, Harvard University, Cambridge, Massachusetts. The program is designed for senior executives who hold positions of major responsibility in the public sector and executives of comparable positions in the private sector whose organizations have important governmental relationships.

Who Should Attend?: SES members who

have ten to 15 years of management experience.

Objectives:
• Develops awareness of the budgetary, political and social environment.
• Promotes performance and accountability in public sector organizations.
• Introduces effective ways to organize and staff policy-making processes.
• Creates an awareness of the various techniques that can be used to build credibility and support outside one's organizational unit.
• Reviews the management styles, attitudes and conduct that build commitment and morale within an organization.

Prerequisite: None.

Length of Course: Three weeks.

Frequency: Once each summer.

Cost: Agency funded.

Contact: Nancy Huntington
John F. Kennedy School of Government
Harvard University
(617) 495-1142

Hugh L. Dryden Memorial Science Fellowship

Description: NASA provides one participant each year for this academic year-long program of technical or scientific graduate study. This study can be done at any accredited graduate school acceptable to NASA and the National Space Club. This fellowship was designed to honor the late Deputy Administrator of NASA, Dr. Hugh L. Dryden, by providing employees of proven ability and outstanding potential with the opportunity to undertake concentrated study of long-range technical or scientific problems in NASA-oriented disciplines.

Who Should Attend?: Participants should have five to 15 years of work experience and college study in NASA-relevant areas of

science.

Objectives:
• This is a highly individualized program of study/research; the participant designs his/her own program.
• The program provides for tuition up to a maximum of $10,000 from NASA and $2,000 from the National Space Club for tuition, travel and extended per diem at the chosen location, plus incidental expenses for up to one year.
• Nominees are selected on the basis of the proposed plan of study/research and the anticipated benefit to the Agency and the individual.

Prerequisite: None.

Length of Course: Academic year.

Frequency: Once per year.

Cost: Agency funded.

Contact: Marcia Nickols
Office of Human Resources and Education, Training and Development
NASA
(202) 453-8692

Industrial College of the Armed Forces

Description: NASA provides one participant for this 11-month program at the Industrial College of the Armed Forces, Fort Leslie J. McNair, Washington, DC. Since NASA does not have a regular space allocation, there is no guarantee that an agency nominee will be accepted into the program.

Who Should Attend?: SES and GS/GM-15 employees with ten to 15 years of management experience and knowledge and understanding of the DoD environment.

Objectives:
The Industrial College of the Armed Forces (ICAF) has the following objectives:

• To provide a foundation of knowledge relating to present and future political, economic, technological, scientific and social phenomena.
• To develop student ability to anticipate, accept and adapt to an environment of accelerating change.
• To improve student competence in problem identification, problem solving, decision-making and leadership skills.
• To develop the ability to think clearly, objectively, logically and creatively as leaders.
• To provide diverse views on the major problems, issues and trends in today's world environment as background and knowledge for key management and policy-making roles in the Federal Government.

Prerequisite: None.

Length of Course: Eleven months.

Frequency: One program held from August through June.

Cost: Agency funded.

Contact: Lt. Col. Abe Smith, USAF
Director, Personnel and Administrative Directorate
National Defense University
(202) 475-1966

James E. Webb Space Administration Fellowship

Description: NASA provides one participant each year for this academic-year-long program of space administration graduate study specifically related to the participant's career goals and anticipated post-study NASA assignments. This study can be done at any accredited graduate school acceptable to both NASA and the National Space Club. This fellowship was designed to honor the former Administrator of NASA, James E. Webb, by providing employees of proven ability and outstanding potential with the opportunity to undertake concentrated studies of long-range problems in

space administration.

Who Should Attend?: Participants should
have five to 15 years of work experience and
college study in NASA-relevant areas of
administration.

Objectives:
• This is a highly individualized program of
study/research; the participant designs her/his
own program.
• The program provides for up to a maximum of
$10,000 from NASA and $2,000 from the
National Space Club for tuition, travel and
extended per diem at the chosen location,
plus incidental expenses for up to one year.
• Nominees are selected on the basis of the
proposed plan of study/research and the
anticipated benefit to the Agency and the
individual.

Prerequisite: None.

Length of Course: Academic year.

Frequency: Once per year.

Cost: Agency funded.

Contact: Marcia Nickols
Office of Human Resources and Education,
Training and Development
NASA
(202) 453-8692

Massachusetts Institute of Technology Center for Advanced Engineering Study

Description: NASA provides one participant
for this 13-week program at M.I.T.'s Center for
Advanced Engineering Study, Cambridge,
Massachusetts. The program enables
engineers and scientists to broaden their
perspective beyond their technical specialty.

Who Should Attend?: Outstanding mid-
career executives who are technically
specialized, to prepare them for more general

and senior management responsibilities.

Objectives:
• Accommodates technical managers who wish
to understand developments bearing directly
on their fields of expertise, who seek in-depth
competence at technological frontiers and who
desire to strengthen their technological base.
• Each participant will be paired with a faculty
advisor who helps to arrange individual
activities that are divided among formal
classroom study, tutorial or research study and
other M.I.T. opportunities best suited to the
needs of the participant and the sponsoring
organization.

Prerequisite: None.

Length of Course: Thirteen weeks.

Frequency: Twice per year.

Cost: Agency funded.

Contact: Dr. Paul Brown
Center for Advanced Engineering Study
M.I.T.
(617) 253-6128

Massachusetts Institute of Technology Management of Technology Program

Description: NASA provides one participant in
this 12-month graduate degree program at M.I.T,
Cambridge, Massachusetts. The program is
designed for experienced engineers and
scientists who are likely to assume increasing
managerial responsibilities in technology-based
organizations.

Who Should Attend?: Participants should
have an undergraduate technical degree and a
minimum of five to ten years experience in
industry or government in areas related to
technology and/or manufacturing. They also
should have completed a year's work in calculus
and economics.

Objectives:
- Provides individuals with essential management skills and understanding as they assume greater responsibility in technical and production oriented organizations.
- The most direct benefits are to individuals who plan for the near future to remain on the technical side of the organization, rather than moving immediately into general management positions.
- Prepares participants for more senior roles in functional management, where they will be able to both generate and manage technology-based endeavors.
- The program is designed around three major integrated elements:
- Core, background subjects in analytical methods drawn from the disciplines of engineering, statistics, mathematics, economics and the behavioral sciences;
- Analysis of the theories, concepts and practice of managing technology-based programs and projects and the management of technical professionals; and
- Preparation of a thesis, under faculty consultation, in the area of technology management.

Prerequisite: None.

Length of Course: Twelve months.

Frequency: Once per year.

Cost: Agency funded.

Contacts: Roger Samuel or Jennifer Mapes
M.I.T.
(617) 253-3734

Massachusetts Institute of Technology Sloan School of Management Degree Program

Description: NASA provides one participant per year for this 12-month degree program at M.I.T.'s Sloan School of Management in Cambridge, Massachusetts. This program is designed to be more academic than many other similar programs leading to the Master of Science in Management.

Who Should Attend?: Outstanding, technologically specialized, mid-career executives, in preparation for more general and senior management responsibilities.

Objectives:
- An emphasis on the understanding of and the ability to work with the broad spectrum of quantitative tools available to management to assist in the gathering and processing of data for decision making and policy formulation.
- Focus on understanding human behavior and, most especially, that this behavior is important and subject to both analysis and influence.
- Provides an understanding of the breadth of functional knowledge that is available to managers.
- Stresses an understanding of the environment which surrounds an organization and of methods for uncovering basic issues and trends in the environment that will affect organizations in the future.

Prerequisite: None.

Length of Course: Twelve months.

Frequency: Once per year.

Cost: Agency funded.

Contact: Dr. Charles R. Grader
Sloan School of Management
M.I.T.
(617) 253-7166

Penn State University Program for Strategic Leadership

NASA will provide up to two participants each year for this two-week program at Penn State University, State College, Pennsylvania.

Who Should Attend?: Senior-level managers and executives at or near the top of

their functional areas who are contributing to the strategic intent of their organizations.
Participants typically have at least eight years of high-level management experience.

Objectives:
- Cross-cultural environmental exercises facilitating the practice of leadership, team-building, cooperation, communication and problem solving capabilities.
- Computerized business simulation illustrating long-term implications of their decisions, the interaction of functional areas within the total organization and the financial impact on the bottom- line.
- Outdoor leadership experience which culminates in he development and implementation of a major project
- Small group discussions, full class discussions and case studies assisting in problem solving and generation of new ideas for the participant's organization.

Prerequisite: None.

Length of Course: Two weeks.

Frequency: One program each spring (to be held March 14 - 26, 1993).

Cost: Agency funded.

Contact: Dr. Albert A. Vicere
Penn State University
(814) 865-3435

Penn State University Scientist/Engineer as Program Manager

Description: NASA provides one or two participants each year for this two-week program at Penn State University, State College, Pennsylvania. The program is held in the fall.

Who Should Attend?: Technical specialists who have assumed managerial responsibilities. Candidates may have been individual contributors for many years or they may have

chosen to enter management in the early stages of their careers. Candidates should have at least five years of managerial experience. Representative titles include director of research, laboratory director, project or technical manager, and department head.

Objectives:
- Explores strategic planning concepts and their impact on the organization.
- Focuses on expanding effectiveness in financial planning and control.
- Emphasizes analysis of management and decision-making styles.
- Seeks to improve understanding of managerial communications.
- Executives participate in a computerized business simulation that emphasizes strategic planning and executive decision making.

Prerequisite: None.

Length of Course: Two weeks.

Frequency: Each fall.

Cost: Agency funded.

Contact: Dr. Albert A. Vicere
Penn State University
(814) 865-3435

Simmons College Program for Developing Executives

Description: NASA provides two participants for this eight-week program (September - November) at Simmons College, Boston, Massachusetts. This certificate program provides a comprehensive general management curriculum designed to meet the needs of contemporary business women.

Who Should Attend?: Women in middle management.

Objectives:
- The Program for Developing Executives (formerly the Middle Management Program) is a

comprehensive general management program.

- This certificate program features a curriculum containing all the functional areas of business (finance, accounting, economics, quantitative skills, strategy, marketing and computer resource management) and a behavioral component. The program relies on teamwork and group effort.

Prerequisite: None.

Length of Course: Eight weeks, held September through November.

Frequency: Once per year.

Cost: Agency funded.

Contacts: Gaynelle Weiss or Susan Kavanaugh
Simmons College
(617) 536-8380

Simmons College Program for Developing Managers

Description: NASA provides one participant for this three-week program held in the spring at Simmons College, Boston, Massachusetts. The program is geared toward newer middle managers or technical specialists. The program covers basic quantitative skills for interpreting and using financial data and fosters team building and problem solving. It allows participants to learn both the conceptual and practical aspects of different business disciplines while also increasing their leadership capabilities.

Who Should Attend?: Newer middle managers or technical specialists.

Objectives:
- Accounting, financial and managerial skills needed for reporting and decision making.
- The quantitative side of business, including economics, computer resource management and strategic marketing.

- Exposure to some of the behavioral aspects of management.

Prerequisite: None.

Length of Course: Three weeks.

Frequency: Once each May.

Cost: Agency funded.

Contacts: Gaynelle Weiss or Susan Kavanaugh
Simmons College
(617) 536-8380

Smith College Management Program for Women

Description: NASA provides two participants each year for this program, which entails two three-week summer sessions at Smith College, Northampton, Massachusetts, in consecutive years, linked by an integrative management project completed on the job during the interim year.

Who Should Attend?: High potential women who are rising general managers.

Objectives:
- Emphasizes analytical skills and creation of an organizational perspective.
- Curriculum includes finance, accounting, budgeting, information systems, marketing and production operations.
- Program also stresses managerial skills; e.g., leadership, work planning, decision-making, troubleshooting and performance evaluation.
- Attention is also paid to formal and informal organization structure; how to build support networks; how to analyze behavior to respond effectively to criticism, competition and team situations.

Prerequisite: None.

Length of Course: Three weeks.

Frequency: Two sessions (summers of 1993 and 1994) linked by an integrative work project during the intervening year.

Cost: Agency funded.

Contact: Susan C. Lowance
Smith College
(413) 585-3060

Stanford University Stanford Sloan Program

Description: NASA provides one participant per year for this nine-month Master of Science in Management program at Stanford University, Palo Alto, California. It is designed to give executives an opportunity to make an intensive study of the current concepts in management, to develop a top management perspective and to stimulate personal growth.

Who Should Attend?: Middle management executives from both public and private sectors in the United States and abroad.

Objectives:
• Equips participants with the latest quantitative methods of decision and analysis.
• Helps participants understand and influence human behavior in organizational settings.
• Helps participants develop a better understanding of the profit and non-profit environments of business and of the economic, social and political responsibility of management.
• Increases the participant's competence in particular areas of specialization, through individual research, supplementary courses and directed reading.

Prerequisite: None.

Length of Course: Academic year.

Frequency: Once per year.

Cost: Agency funded.

Contact: Hal Louchheim
Stanford Sloan Program
Stanford University
(415) 723-2270

Syracuse University Maxwell Mid-career Development Program

Description: NASA provides one person per session for this 15-week program at the Maxwell Graduate School of Citizenship and Public Affairs, Syracuse University, Syracuse, New York. The program is designed for experienced government managers who have been identified by their agencies as being high potential individuals.

Who Should Attend?: Experienced managers employed in the public sector for five or more years who have had substantial supervisory experience.

Objectives:
• Develop an understanding of the social, economic and political forces influencing organizations.
• Develop an understanding of public organizations and their managerial systems and processes.
• Develop skills in analysis, communications, leadership and decision making required of public managers.
• Provide participants with an opportunity to assess managerial capabilities and to design a career strategy.

The participants will normally take five or six graduate-level courses. Two of these courses, Mid-career Development and Executive Action, are mandatory. The remaining courses are optional and specifically relate to the participant's professional needs.

Prerequisite: None.

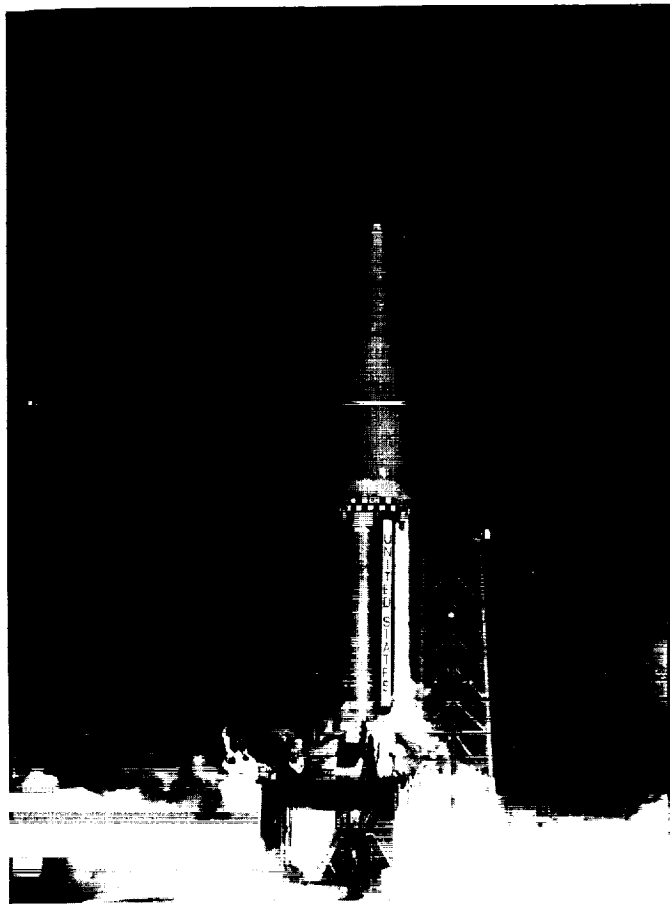**Length of Course:** Fifteen weeks.

Frequency: Two sessions per year (Spring

and Fall).

Cost: Agency funded.

Contact: William J. Sullivan
Syracuse University
(315) 443-3759

C.
UNDERGRADUATE ACADEMIC STUDY

(CONTINUING EDUCATION PROGRAM)

Undergraduate Academic Study

There are two basic approaches for pursuing undergraduate academic study:

1. Course-by-course approval: Code allocated money is used to fund undergraduate academic study on a course-by-course basis for individuals (similar to any off-site, non-government training).

2. Continuing Education Programs (CEP I & II): See section on "Continuing Education Programs." Headquarters General Activities funded.

Continuing Education Programs (CEP I & II)

The Continuing Education Program (CEP) is designed to enable highly motivated individuals in non-professional positions to complete a college degree in order to qualify for professional positions at NASA. CEP I is open to anyone who:

- Is currently a permanent NASA employee
- Has completed the one-year probationary period
- Has an appointment in a non-professional position at the time of application to CEP, and is in the GS-1 to GS-11 pay range
- Does not have a bachelor's degree
- Has the recommendation of her or his supervisor
- Has an Individual Development Plan (IDP) on file
- Has a specific career goal
- Plans to take courses necessary to achieve the chosen career goal
- Has been accepted into a specific program at an area college (if participants are within the first two years of a college program, they must attend a two-year or community college)

CEP I students are expected to attend classes after work, through the Fall, Spring, and Summer semesters, and must maintain a"C+" average (2.7) or better.

CEP I students who complete one year (at least 12 credit hours) in the program with a "B" average may apply for admission into the CEP II program. CEP II students may, with the permission of their supervisor, take up to eight hours per week of work time to attend class.

D.
PROFESSIONAL DEVELOPMENT PROGRAM
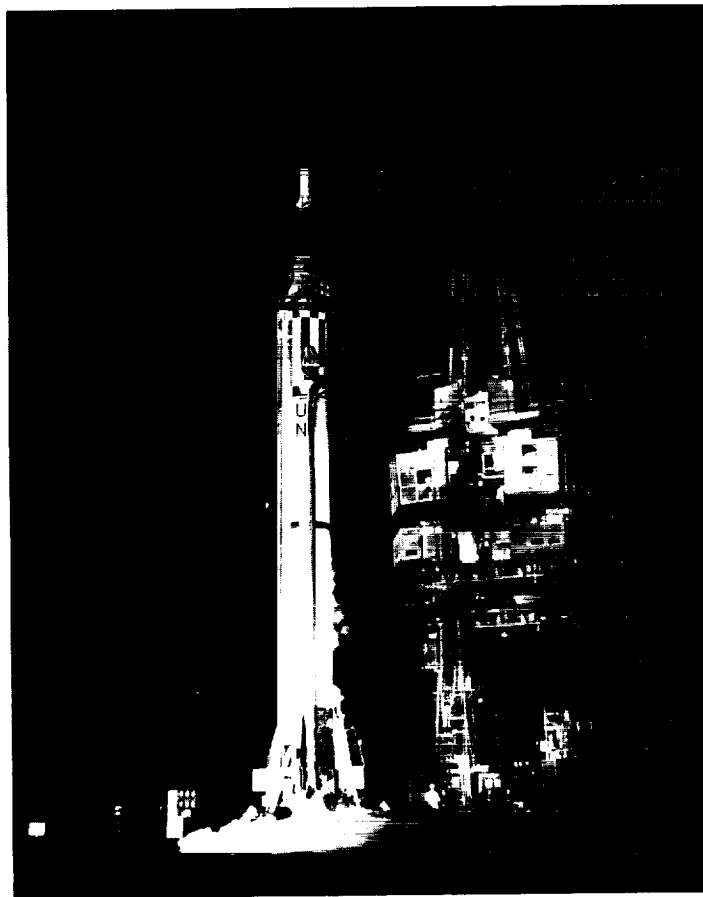
Professional Development Program (PDP)

Curriculum

The Professional Development Program is a NASA-wide program operated by the Office of Human Resources and Education. It is designed to broaden the participants' knowledge and understanding of the agency through a combination of expanded work experiences and formal training.

Who Should Attend?: Selected professional personnel with five to ten years of NASA experience who are willing to relocate for a one-year developmental work assignment. Program size: Approximately 30 agency participants per session.

Program Highlights:
- The program is divided into three levels of participation: Levels I and II (for GM/GS-13 through SES) require one-year assignments at NASA locations different from one's home installation. Level III operates within the home installation for varying lengths of time, up to one year. (There is currently no level III program operating for NASA headquarters.)
- Work assignments are supplemented by formal classroom education appropriate to individuals' developmental needs.
- Participants also attend various briefings and staff meetings, as well as networking meetings with other PDP participants serving at the same location.
- A five-day orientation meeting is held in early summer at the Management Education Center, Wallops Flight Facility, Wallops Island, Virginia. The intent is to prepare participants for the various transitions they will experience over the next year and to begin to build community. This meeting involves lecture presentations and participation in a variety of small group and individual learning activities.
- Instruction is provided by the Training and Development Division staff, guest lecturers from the Headquarters Accounting Branch and past program participants.

Nomination/Registration Process

Nominations for this program are generally made from the Codes to the Headquarters Training Office (Code FTH) during January of each year. All nominations should be made on NASA Form 1591. An initial recommendation will be made of Headquarters nominees by a panel of executives representing the various Headquarters Codes. Nominations will be forwarded to the Office of Human Resources and Education for selection by an agency panel of executives.
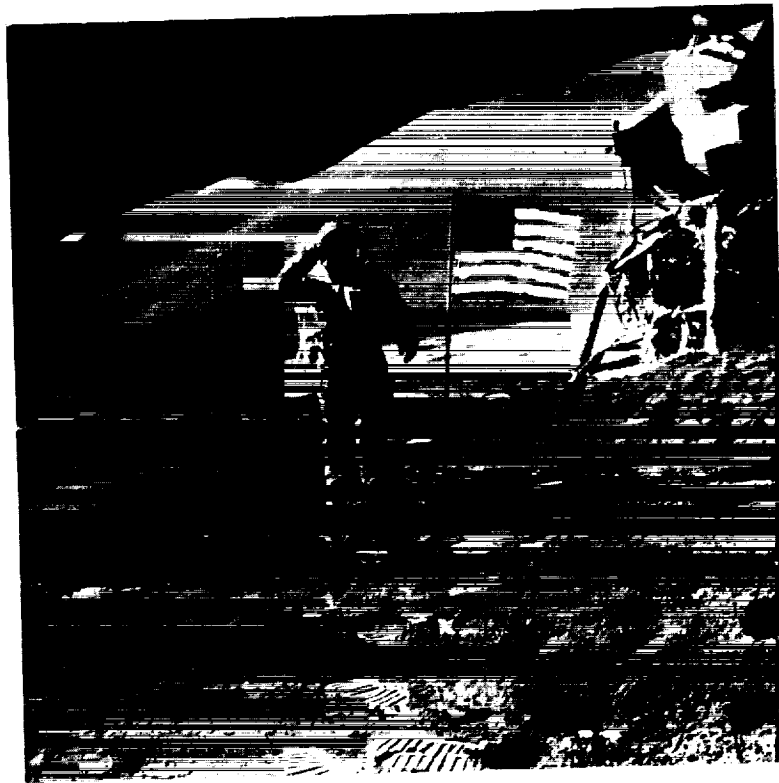
Prerequisite: None.

Length of Course: Twelve months.

Frequency: Program year runs from August to July--with an orientation session held in June.

Cost: Agency funded.

E.
EXECUTIVE AND SENIOR MANAGEMENT DEVELOPMENT

Executive and Senior Management Development

The Headquarters Executive and Senior Management training alternatives can be categorized in five general program areas:

1. NASA Executive and Management Development
2. Federal Executive Institute
3. OPM Executive Seminar Centers
4. Brookings Institution Programs
5. Other Alternatives

A brief description of each of these general program areas proceeds the seminar descriptions.

NASA Executive and Management Development

Curriculum

The Executive and Management Development Program is a NASA-wide program managed by the Training and Development Division, within the Office of Human Resources and Education. It is designed to provide continuing education for NASA's executives and senior managers whose charge it is to lead, manage and influence NASA's employees and its organization. Executive and Management Development provides the tools to help managers successfully motivate their employees, manage change and develop as the future leaders of our organization.

The curriculum includes a variety of concentrated short-term, residential programs usually held at the Management Education Center, Wallops Island, Virginia. The participants experience various instructional activities including feedback from peers and subordinates, small group activities, lectures and videotaped discussions and interactions with each other.

This section of the catalog describes the curriculum offered to NASA's managers through the Agency Executive and Management Development Program. It explains the course objectives, nomination criteria, topics covered, course structure, instructional methods and instructors.

Nomination/Registration Process

The Executive and Management Development Program staff issues an annual calendar of courses one year in advance. Nominations must typically be made eight to twelve weeks before the beginning of each course in order to complete pre-course assignments. Nominations are processed by the Headquarters Training Office and coordinated with the Executive and Management Development staff at Headquarters.

Executive and Management Development courses are generally designed for NASA managers and executives, usually grade levels 14 and above.

The Training and Development Division normally covers meals, lodging and instructor's costs; participant's organizations are responsible for transportation.

For more information, please feel free to contact NASA Executive and Management Development staff, past course participants or the Headquarters Training Office.

Management Education Program (MEP)

Description: The MEP is an intensive 12-day residential program for senior NASA managers held at the Management Education Center. The MEP begins on Monday evening of the first week, continues through the weekend and ends at noon on Friday of the following week. The MEP is typically conducted four times a year.

Course Objectives: To expand understanding of one's management practices and their impact on the work unit climate, to increase understanding of effective management processes regarding individuals and groups, and to enhance understanding of the principles of managing change. The course also promotes an understanding of NASA as a dynamic system of interdependent installations, programs and offices and promotes learning from the knowledge and experience of fellow participants.

Who Should Attend?: NASA project, branch or division level managers at the GM-14 or 15 level. Typically, participants are managers of multiple organizational units. Preference will be given to nominees who have been promoted (or transferred from another agency or company) to their current positions within the past six to 18 months. Program size: 30 participants per session.

Program Highlights:
• An understanding of NASA's past, present and future and how all installations contribute to the larger NASA goals.
• An analysis of the participant's own managerial practices with a comparison to practices that are most effective in NASA.
• Steps that each participant can take to strengthen his/her managerial performance.
• Presentations and discussions of current theories, concepts and issues conducted by recognized experts in the fields of management and human behavior.
• A series of in-depth `give and take' discussions on current issues facing the Agency with the Administrator or Deputy Administrator; several Associate Administrators or their deputies; officials from the Office of the Comptroller, Human Resources, Procurement and the Inspector General; and a Center Director.

Prerequisite: None.

Length of Course: Twelve days.

Frequency: Four times per year.

Cost: Agency funded.

Senior Executive Program (SEP)

Description: The SEP is an intensive eight-day residential development program for NASA SES incumbents. It is conducted twice yearly. SEP's begin on Wednesday evening, continue through the weekend and conclude at noon on the following Wednesday.

Course Objectives: To enhance the participant's appreciation for the complex external environment (Congress, OMB and Industry) which influences NASA's program decisions and to increase the participants' awareness of their executive practices and the effect of these practices on their organizational climate. Participants will discuss agency-wide issues and concerns with senior NASA officials, identify roles and responsibilities for SES members and network with other executives to view NASA as one organization.

Who Should Attend?: SES incumbents who have been in their position for at least 12 to 18 months. Program size: 24 participants per session.

Program Highlights:
• Survey feedback from direct reports on executive practices and organization climate.
• Discussion of a NASA-specific case study to identify alternate ways of dealing with organization and management issues.
• Study of an organization model as a composite of interdependent systems.
• The factors to consider for effectively bringing about change in organizations.
• The roles of leaders vs. managers in organizations.
• Dialogues with high ranking members of key external organizations which influence NASA, e.g., the Congress, OMB and private industry.
• Conversations with senior NASA officials about NASA issues and concerns, and the leadership role SES members can take in helping to resolve some of the issues.

Prerequisite: None.

Length of Course: Eight days.

Frequency: Twice yearly.

Cost: Agency funded.

The Human Element (THE)

Description: The Human Element is an intensive six-day residential program offered at the Management Education Center and once a year at a NASA installation for members of that community only. The program begins Sunday evening and ends Friday at noon.

Course Objective: To develop a greater awareness of one's behavior towards other people, the effects of that behavior, and one's feelings towards others and towards oneself. The course also explores how behavior, feelings and self-concept affect work relationships, productivity, motivation and team development.

Who Should Attend?: MEP and SEP alumni and an equal number of `high potentials' from each NASA installation. This is the most advanced course in interpersonal skills awareness and development that NASA offers. The program is more participative and experiential than our other programs, more intrapersonal and interpersonal in nature and is most effective when participants are there because they have personally chosen to participate. Program size: 30 participants per session.

Program Highlights:
- The Basics of Empowerment - The basic principles of self-awareness, openness and self- determination and how they empower individuals, teams and organizations. How these principles have been used to increase organizational productivity.
- Self-Knowledge Into Self-Power - The three aspects of behavior: Inclusion, Control and Openness.

- From Blame to Empowerment - Everyone loses when `The Blame Game' is played. Why `everyone contributes and no one is to blame' leads to increased productivity. How coping mechanisms affect relationships.
- Effective Team Building - Identifying and turning around performance troublespots.

Prerequisite: None.

Length of Course: Six days.

Frequency: Approx. four times a year at Wallops Management Education Center and one time a year at an installation.

Cost: Agency funded.

Looking Glass (LG)

Description: The Looking Glass is a five-day residential workshop conducted twice yearly at the Management Education Center. Looking Glass begins on Monday evening and ends on Friday at noon.

Course Objective: To examine one's interpersonal, leadership and decision styles and identify organizational patterns of behavior. Participants will also consider the impact of organizational norms on their own behavior.

Who Should Attend?: Employees with three or more years of supervisory/management experience. Branch or Division level managers are best suited. Program size: A firm 20 participants per session.

Program Highlights:
- A structured simulation in managing a fictitious company, `Looking Glass, Inc.' by the corporation's top 20 executives (roles played by the program participants). This is accomplished through an `In-basket' (i.e., non-computerized modeling) organizational simulation involving group interaction and feedback.
- The approach is inductive: The participants first examine their own behavior in Looking

Glass; then from the debriefings, extract lessons about management that apply specifically to themselves.
• A survey is administered to each participant's colleagues prior to the workshop which provides additional feedback on their managerial behaviors.

Prerequisite: None.

Length of Course: Five days.

Frequency: Twice per year.

Cost: Agency funded.

Crossing Department Lines (CDL)

Description: CDL is a five-day residential program for non-manager/non-supervisory personnel who have project or team leader responsibilities. The program is held at the Management Education Center twice a year. CDL's begin on Monday evening and end Friday at noon.

Course Objective: To increase participant's effectiveness and improve their ability to work with others within/outside their work unit, over whom they have no 'direct line' or 'position' authority.

Who Should Attend?: Non-manager/non-supervisory personnel at mid and upper GS levels. It is especially useful for chief engineer and project/team leader types or individual contributors who are not formally classified as supervisors, but who must rely on others to get their work done both within their organization and across organizational lines. Program size: Up to 40 participants per session.

Program Highlights:
• Assess the effects of the participants' style of influence on their relationships with their peers.
• Identify methods for handling conflict and resolving differences among peers who are an

integral part of the network of people whose cooperation the participant needs to get his/her job done.
• Evaluate the factors that influence the motivation and performance of their peers.
• Determine the critical factors that contribute to or inhibit effective relationships with their peers.
• Identify the opportunities participants have to increase their effectiveness and improve relationships with their peers.

Prerequisite: None.

Length of Course: Five days.

Frequency: Twice yearly.

Cost: Agency funded.

NASA-Wide Senior Executive Service (SES) Orientation Program

Description: The NASA-wide SES Orientation Program is a two and a half-day residential program for newly appointed senior executives. The SES Orientation begins on Monday evening and ends Wednesday afternoon. This program is conducted semi-annually at a Washington, D.C. hotel near NASA Headquarters. This program does not replace or conflict with the OPM orientation for all new government SES personnel, and is sometimes scheduled in conjunction with the OPM orientation.

Course Objective: To ensure that our new SES personnel understand and appreciate their role as the leadership corps of NASA and to orient newly appointed senior executives with the way NASA does business. The course provides a forum for NASA executives and program participants to meet, exchange thoughts and ideas, discuss issues and share concerns facing NASA and the senior executive today.

Who Should Attend?: Newly appointed

SES members, within nine months of their appointment and prior to attending the Senior Executive Program (SEP). Program size: 50 participants per session.

Program Highlights:
- Presentations are made by the Administrator and other key NASA officials around the topics of:
    - NASA Leadership Corps - roles, responsibilities and obligations of SES members
    - How Washington Works
    - The NASA Budget
    - Ethics
    - Dealing with the Media
    - Key NASA programs and current issues they are dealing with

Prerequisite: None.

Length of Course: Two and one-half days.

Frequency: Twice yearly.

Cost: Agency funded.

Development Program for Deputies

Description: The Development Program for Deputies consists of an evening dinner and working session followed by a full day of presentations and discussions. This program is conducted at a Washington D.C. area every 18 months, usually in conjunction with another meeting involving most of the Deputies.

Course Objective: The program focuses on current organization issues (e.g., TQM; assessing and changing an organization's culture; alternative career patterns within organizations) and their application or impact within NASA.

Who Should Attend?: Deputy Center Directors and Deputy Associate/Assistant Administrators.

Program Highlights:
- Topics of discussion vary with program theme. The format typically is a presentation given by experts, followed by discussions on applications to NASA. The Administrator or Deputy Administrator is usually invited to address the group at the end of the program.

Prerequisite: None.

Length of Course: One and a half days.

Frequency: Once every eighteen months.

Cost: Agency funded.

Executive Television Workshop (ETW)

Description: The Executive Television Workshop is a residential workshop offered once or twice a year at the Management Education Center for senior NASA officials. The course consists of an evening plus one full day of training.

Course Objective: To learn and practice the skills for managing media interviews. Participants learn to present their views clearly, forcefully and use interviews to get NASA's message to the public.

Who Should Attend?: Senior management (Associate Administrators and Center Directors, their Deputies, Directors and Senior Program Managers). Program size: 5 participants per session.

Program Highlights:
- Participants are taught how to feel and look comfortable and in command in front of the camera.
- Up to six on-camera interviews, built around each senior executive's needs and issues, to ensure that the workshop is realistic and can serve as a rehearsal for real-life interviews.
- On-camera exercises run the gamut from a non-threatening, easy interview to ones that

stimulate and challenge. Included is training in skills that enable the senior executive to handle the tough questions; a panel or cross-fire experience; an impromptu confrontation with reporters; and a news conference Q&A session.

Prerequisite: None.

Length of Course: One and a half days.

Frequency: Once or twice a year.

Cost: Agency funded.

Federal Executive Institute

Leadership for a Democratic Society

Description: This program emphasizes a performance based approach to individual development and leadership in the Federal context. The fundamental program objective is to link individual development to improved organizational performance. The program addresses the active leadership role expected of career senior managers and the democratic values and beliefs that underpin that leadership. The theme of "specialist to generalist to leader" is integrated throughout the program as participants focus on innovative Federal management practice, through access to distinguished speakers and week-long classes that stress the strategic view of executive management and human resource development.

Objectives:
• To provide participants with realistic feedback on their performance as executives, on the complexities of their environment and cues to its dynamics for later problem solving in their agencies.

• Learn to solve problems through teamwork.
• Examine the analytical framework for synthesizing the environmental, organizational and individual aspects of leadership.

Who Should Attend?: Members of the Senior Executive Service, GM-15 SES candidates, and GS-15 high potential managers.

Prerequisite: None.

Length of Course: Four weeks.

Frequency: Approx. six times per year.

Cost: Agency funded.

OPM Executive Seminar Center Programs

The Office of Personnel Management operates three Executive Seminar Centers:
- Eastern (King's Point, NY)
- Central (Oak Ridge, TN)
- Western (Denver, CO)

Seminars from these Centers are also scheduled at Lancaster, PA and San Francisco, CA. Not all seminars are offered at all sites and scheduling is generally completed once a year in August. The Headquarters Training Office presents a call to Codes during June requesting nominations for the following Fiscal Year Programs. Selection for these programs is on a competitive basis.

All seminars listed below are two-weeks (ten days) in duration. Lodging and meals are provided. Organizations are required to provide travel funds.

OPM Seminar for New Managers

Description: This course provides new government managers an opportunity to learn and practice managerial skills needed to

effectively meet the current and future challenges of public service. The purpose of this seminar is to assist participants in making the transition to their new management positions.

Objectives:
- To develop a capacity for strategic management thinking.
- To improve ability to deal with ambiguity, competing interest and institutional values.
- To widen perspectives on Federal management issues.
- To improve understanding of the U.S. Constitution.
- To prepare for change in the composition and values of the workforce.

Who Should Attend?: Public sector managers with less than two years of managerial experience, usually at the GM/S 13 level.

Prerequisite: None

Length of Course: Two weeks.

Frequency: Varies.

Cost: Headquarters General Activities funded.

OPM Management Development Seminar

Description: This seminar provides an opportunity for experienced managers to develop new capabilities as well as enhance those which have supported their management excellence in the past.

Objectives:
- To assist managers and executives in achieving continuous organizational improvement.
- To provide information on trends affecting management behaviors, processes, and current developments in the public service environment and in leadership and organizational dynamics.

Who Should Attend?: Experienced

managers, usually at the GM/S 14 level or above.

Prerequisite: None.

Length of Course: Two weeks.

Frequency: Varies.

Cost: Headquarters General Activities funded.

OPM Executive Development Seminar

Description: This intensive seminar assists senior managers in making the transition to executive positions. This seminar provides a working knowledge of executive roles in government and helps participants develop, practice and expand their executive leadership skills. Senior Executive Competencies are emphasized.

Objectives:
- To examine alternative views on the role of the public sector and their implications for executive management.
- To develop a clearer understanding of the profession and discipline of management for careerists at the executive level in American public service.
- To clarify role expectations for career executives in such areas as policy development and implementation and external relationships.
- To improve the capacity for managing through systems in large organizations.
- To understand better the need for developing accountability in an organization and the means for achieving it in the Federal government.

Who Should Attend?: GM/S 15's and recently-appointed members of the Senior Executive Service.

Prerequisite: None.

Length of Course: Two weeks.

Frequency: Varies.

Cost: Headquarters General Activities funded.

OPM-Managerial Competencies for Executives

Description: This seminar emphasizes management skills needed to operate in the policy context typical of many higher-level management jobs.

Objectives:
- To build skills in developing effective working relationships and collaborative problem solving.
- To increase ability to analyze complex management and policy issues.

Who Should Attend?: Managers at the GM/S 14 level or above, and executives who have moved from technical, scientific, or specialist positions directly into management at a relatively high level, without benefit of supervisory and management experience and training at lower levels.

Prerequisite: None.

Length of Course: Two weeks.

Frequency: Varies.

Cost: Headquarters General Activities funded.

OPM-Total Quality Management in the Public Sector

Description: This seminar addresses the critical need for increasing organizational performance and improving public sector productivity.

Objectives:
- To learn the strategies of total quality management.

- To focus on improving the quality of public service organizations.

Who Should Attend?: Managers at the GM/S 14 level and above.

Prerequisite: None.

Length of Course: Two weeks.

Frequency: Varies.

Cost: Headquarters General Activities funded.

OPM-Administration of Public Policy

Description: This seminar provides an understanding of the political, social, economic, and cultural environment in which the United States policy is initiated, developed, and implemented.

Objectives:
- To examine major governmental policy-making institutions as well as the non-governmental institutions and forces that shape public policy.
- To consider important aspects of policy administration including the relationship of political and career executives, legislative oversight and the role of the General Accounting Office, the ethical dimensions of administrative discretion, and problems of responsible and politically responsive execution and evaluation.

Who Should Attend?: Managers at the GM/S 14 level and above, or executives who are involved in the implementation of Federal policy or programs.

Prerequisite: None.

Length of Course: Two weeks.

Frequency: Varies.

Cost: Headquarters General Activities funded.

OPM-Federal Budgetary Policy and Processes

Description: This seminar examines the budget process from budget preparation through budget execution and culminates in a simulation of the process.

Objectives:
- To learn about the Federal and agency budgetary process.
- To learn about procurement policy and institutions, and other significant resource issues.

Who Should Attend?: Federal managers, at the GM/S 14 level and above, and executives who are directly responsible for program expenditures, resource management, or budget preparation.

Prerequisite: None.

Length of Course: Two weeks.

Frequency: Varies.

Cost: Headquarters General Activities funded.

OPM-Science, Technology, and Public Policy

Description: This seminar examines the role and organization of the Federal government in science and technology.

Objectives:
- To provide a current analysis of the policy development process, including the interaction of political, economic and societal forces.
- To review and assess selected issues of national and international significance.
- To investigate the critical role of the Federal science and technology community and the future direction of science policy management.

Who Should Attend?: Managers at the GM/S 14 level or above whose programs or policies are related to science and technology.

Prerequisite: None.

Length of Course: Two weeks.

Frequency: Varies.

Cost: Headquarters General Activities funded.

OPM-Technology Transfer and the Management of Federal R & D

Description: This seminar provides an understanding of the philosophy that underlies technology transfer.

Objectives:
- To examine the difference between lawful and unlawful transfer of technologies.
- To provide participants with a conceptual framework within which they will examine some of the issues associated with technology transfer in the context of management responsibility for Federal research and development (R & D).

Who Should Attend?: GM/S 14 through SES Federal managers and executives, who develop and implement plans and programs to identify and transfer selected technologies from the Federal government to the private sector for commercial use.

Prerequisite: None.

Length of Course: Two weeks.

Frequency: Varies.

Cost: Headquarters General Activities funded.

Brookings Institution Programs

The Brookings Institution offers one-day to one-week policy seminars at various sites in the United States. Completion of a five- or six-day program qualifies the student to attend the three-day Alumni Update Program. The major policy seminars are listed in this catalog but additional one- to three-day programs are also available. Tuition includes lodging and meals; Organizations are required to fund travel.

Alumni Update Program-Brookings Inst.

Description: This course uses informal discussion sessions with policy makers and experts to explore a wide variety of current issues, both domestic and foreign.

Objectives:
- Update one's knowledge of the public policy process.
- Obtain a current outlook on issues in the public policy arena.
- Discuss new management challenges in the public sector.

Who Should Attend?: Alumni of Brookings' one week programs for government executives.

Prerequisite: See above.

Length of Course: Three days.

Frequency: Once per year.

Cost: Headquarters General Activities funded.

New Directions in National Policymaking-Brookings Inst.

Description: This course is designed to explore the current and future constitutional, economic, social, technological, demographic, and international relationships in the American system of government.

Objectives:
- Improve performance within your agency by gaining new insights into other policy areas, the current policymaking process, and future developments on the policymaking horizon.
- Increase effectiveness by understanding the framework for and the process by which public policy is made.
- Examine ways of responding to current and developing issues and analyze how they will affect the individual's and agency's operations.

Who Should Attend?: Members of the SES and GS-15 to GS-18, or equivalent.

Prerequisite: None.

Length of Course: Six days.

Frequency: Approx. three times per year.

Cost: Headquarters General Activities funded.

Emerging Issues in Public Management-Brookings Inst.

Description: This course is designed to examine management challenges facing the public sector and to explore strategies for responding to these challenges.

Objectives:
- To compare management practices in one's agency with those of other agencies and the private sector.
- To improve the participant's agency's ability to respond to management challenges from the public sector.
- Evaluate different skills and strategies that may assist the participant in their current and future managerial responsibilities.

Who Should Attend?: GS/GM-15 managers and above.

Prerequisite: None

Length of Course: Five days.

Frequency: Approx. twice per year.

Cost: Headquarters General Activities funded.

Issues in Science and Technology Policy-Brookings Inst.

Description: To provide insights into current and emerging issues in science and technology public policy while increasing understanding of the science policymaking process.

Objectives:
- Evaluate current technical and policy issues in research and development as they affect federal agencies and overall national policymaking.
- Understand the process and prospects for government R&D from a policy perspective rather than a technical perspective.
- Improve leadership in managers as they develop an appreciation of their agency's role in the broad cross-section of science and technology policymaking.
- Communicate the agency's needs more effectively to policymakers.

Who Should Attend?: Technical managers and policymakers, GS-15 or equivalent and higher.

Prerequisite: None

Length of Course: Six days.

Frequency: Approx. four times per year.

Cost: Headquarters General Activities funded.

Understanding Business Policy and Operations-Brookings Inst.

Description: This course is designed to foster a candid exchange between leaders in government, business, and other organizations on policy and management issues, strategies, and operations.

Objectives:
- To improve business-government interaction through candid exchanges on issues of mutual concern.
- To understand the impact of government activity on business.
- To gain new perspectives and improve your management abilities by comparing organizational strategies and techniques.
- To achieve an overview of the current trends in business and the competitive position of the United States.

Who Should Attend?: GS-15 and above, or equivalent.

Prerequisite: None

Length of Course: Six days.

Frequency: Approx. three times per year.

Cost: Headquarters General Activities funded.

Total Quality Management (TQM) In American Industry-Brookings Inst.

Description: This course is designed to give the participant insight into productivity and quality initiatives in the private sector for potential application to agency activities.

Objectives:
- To experience and apply the principles of Total Quality Management to the participant's agency's activities.

- To review the role of management in achieving productivity and quality improvements in one's agency.
- To learn new techniques of measurement, control, and reliability assurance.

Who Should Attend?: GS-15 or above and equivalent.

Prerequisite: None.

Length of Course: Six days.

Frequency: Approx. three times per year.

Cost: Headquarters General Activities funded.

Executive Leadership in a Changing Policy Environment-Brookings Inst.

Description: This course is designed to reflect on the process and problems of public policy formulation and implementation and to examine trends affecting the future national policy environment.

Objectives:
- To deal more effectively with Congress, the media, interest groups, the judiciary, the Executive Office of the President, state and local governments, and the business community.
- To improve planning through an awareness of alternative views of the future and ways to develop innovative responses to change.
- To reflect on the role of the federal executive and how more effective public policymaking can be achieved.

Who Should Attend?: Members of the SES.

Prerequisite: None.

Length of Course: Six days.

Frequency: Approx. twice per year.

Cost: Headquarters General Activities funded.

Other Alternatives

Additional management courses may be proposed by Codes for their managers to attend. Programs for which a number of Headquarters employees have previously been nominated are listed below.

Legis Fellows Program

Description: NASA provides one or two Headquarters participants each year for this OPM-sponsored program, which provides a developmental work assignment with a member of Congress or a committee staff member.

Who Should Attend?: GS/GM-15 and SES members, with ten to 15 years of professional experience (five of which should be in a management capacity). Nominees should have the ability to initiate work and to work with minimal supervision, as well as an interest in legislative procedures, practices and techniques.

Objectives:
- Three weeks of intensive briefings on the operations and organization of the Congress.
- Full-time developmental work assignment on the staff of a member, committee or support agency organization of the Congress.
- Frequent seminars during the work assignment on Capitol Hill.
- The 12-month LEGIS program allows for a more intensive look at the legislative process.

Prerequisite: None.

Length of Course: See frequency.

Frequency: Two six-month programs (January - June; June - December) and one 12-month program (January - December).

Cost: Agency funded.

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Office of Personnel Management
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The Negotiating Edge

Description: Effective negotiation often means the ability to negotiate effectively outside our environment, but inside as well. The negotiator must know how to preserve relationships, determine needs, and successfully resolve disputes.

Objectives:
• To learn the fundamentals of the negotiating process.
• To learn how to control the negotiating process in order to create a rational outcome.
• To learn how to improve your relationship with the negotiating adversary.

Who Should Attend?: Managers, supervisors, engineers, procurement officials, and professional administrators.

Prerequisite: Successful performance requires negotiating skill.

Length of Course: One day.

Frequency: Twice per year.

Cost: Headquarters General Activities funded.

Effective Negotiating Skills

Description: The lack of effective negotiating skill can result in customer dissatisfaction, personnel and staff problems, reduced competitiveness, increased costs, unnecessary delays, misunderstandings, litigation and, in general, a significant reduction in productivity and job satisfaction. This course is designed to provide participants with a framework for

successful negotiation.

Objectives:
• To learn the effective principles of the negotiation process.
• To learn how to negotiate against deadlines.
• To learn how to deal with difficult or intransigent people.
• To learn how to prepare for negotiations.
• To learn how to improve your relationship with your negotiating adversary.

Who Should Attend?: Managers, supervisors, project managers, engineers, and procurement officials.

Prerequisite: Participants should be at the GM-13 level or above.

Length of Course: Two days.

Frequency: Twice per year.

Cost: Headquarters General Activities funded.

F.
SUPERVISORY DEVELOPMENT

Supervisory Development

NMI 3410 requires that new supervisors (regardless of grade) receive 40 hours of management training within 6 months and 80 hours of management training within 2 years of appointment. Headquarters management training which meets this requirement may be classified into three categories:

1. Management Learning Systems Programs
2. NASA Headquarters Management Processes (NHMP)
3. Office of Personnel Management Supervisory Courses

Experienced supervisors are also expected to keep abreast of changes in management theory and practices. Organizations should make every attempt to assure that opportunity for continuing education exists for all assigned supervisors.

Management Learning Systems Programs

An existing contract exists between NASA Headquarters and Management Learning Systems (MLS) for management training. Courses listed below have been developed by MLS specifically for management of Headquarter's operation and administration.

Supervisors and Managers Training Program (SUPER M/T)

Description: The purpose of the Supervisors and Managers Training Program (SUPER M/T) is to examine and improve "people" management skills by experiencing a workshop in the assessment of the participant's capabilities, communication skills, leadership styles, group dynamics and decision making. This workshop deals with self and employee motivation, effective management of interpersonal and intergroup conflicts, soliciting information and giving positive and corrective feedback. The content and approach provide linkage to the real world of work.

Objectives:
- To build interpersonal communication skills.
- To build leadership values and skills.
- To build decision-making skills.
- To build an understanding of employee motivation.

Who Should Attend?: Supervisors and program/project managers.

Prerequisite: Supervisor or lead specialist assignment.

Length of Course: Five days.

Frequency: Twice per year.

Cost: Headquarters General Activities funded.

Planning the Work of the Organization

Description: Planning is a highly complex social and technical process which involves a high degree of management skill. The management role in developing processes which identify and obtain the required decision-making information, communicate expectations for scope and difficulty of work, and which identify resources for completing the organizational objectives are discussed in this highly practical, experience-based seminar.

Objectives:
- Define and explain the long and short range objectives, goals and customer requirements to be achieved in their organization.
- Plan the work of others in their organization by

defining the specific job/work responsibilities and results to be accomplished by employees.
- Use various planning techniques to establish realistic milestones and deadlines for the tasks and assignments of employees as well as other measurements to determine how well a job or assignment has been performed.
- Develop contingency plans to achieve the desired results if the primary plan runs into difficulty.

Who Should Attend?: Supervisor or lead specialists.

Prerequisite: None.

Length of Course: Two days.

Frequency: Once a year.

Cost: Headquarters General Activities funded.

The Learning Organization

Description: Learning disabilities are tragic in children, but they are fatal in organizations. Perhaps your own organization is subject to crippling learning disabilities. This program emphasizes five disciplines to overcome disabilities and create a learning organization. This course is based on Peter Senge's research.

Objectives:
- To build systems thinking.
- To build a motivation for personal mastery.
- To build a mental model for how to take action.
- To build a shared vision with others in the organization.
- To build a motivation for team learning.

Who Should Attend?: Supervisors or lead specialists.

Prerequisite: None.

Length of Course: Three days; nonresidential.

Frequency: Twice per year.

Cost: Headquarters General Activities funded.

NASA Headquarters Management Processes (NHMP)

Description: This course provides NASA Headquarters supervisors information on institutional personnel, procurement, and budgeting processes. A self-assessment of leadership knowledge is completed to define individual needs for additional training.

Objectives:
- Increase knowledge of federal and agency management policies and procedures.
- Increase knowledge on how to provide appropriate leadership in the context of continuous improvement.
- Increase self-awareness of strengths and deficiencies of the various types of leadership knowledge needed for success.

Who Should Attend?: All NASA Headquarters supervisors.

Prerequisite: Supervisory appointment, or anyone carrying out supervisory responsibilities.

Length of Course: Fifty-six hours.

Frequency: Twice per year.

Cost: Headquarters General Activities funded.

Office of Personnel Management Supervisory Courses

OPM-Introduction to Supervision

Description: This course is designed to help new or prospective supervisors make the transition from worker to supervisor. The course covers, in survey fashion, all the basic skills needed by a new supervisor.

Objectives:
- To improve skills in such critical areas as communication, delegation, motivation, conflict management, time management, performance appraisal, and personnel management.

Who Should Attend?: New supervisors and those about to become supervisors.

Prerequisite: None.

Length of Course: Five days.

Frequency: At least once per month.

Cost: Headquarters General Activities funded.

OPM-Supervision and Group Performance

Description: This course gives the participant practice in interpersonal skills, determining what motivates each employee, and determining how to get the best performance from one's group.

Objectives:
- To learn about group behavior, human resource development, decision making, leadership skills, improving communication, managing the change process, and interpersonal power, values, and conduct.

Who Should Attend?: Supervisors and group/team leaders.

Prerequisite: None; often follows "Introduction to Supervision" course.

Length of Course: Five days.

Frequency: Approx. seven times per year.

Cost: Headquarters General Activities funded.

OPM-Management Functions and Techniques

Description: This course teachers supervisors to utilize their resources in achieving their organization's mission as effectively and efficiently as possible.

Objectives:
- To learn planning techniques, including clarifying short- and long-range objectives.
- To learn to organize staff in order to match their skills to the required tasks.
- To learn to direct, delegate, and assign authorities and responsibilities.
- To learn to control, monitor, and evaluate the progress and performance of one's staff.
- To learn how to provide feedback and recognition.

Who Should Attend?: Supervisors.

Prerequisite: None; this course may follow the "Introduction to Supervision" course.

Length of Course: Five days.

Frequency: Approx. five times per year.

Cost: Headquarters General Activities funded.

G.
PROGRAM/PROJECT MANAGEMENT INITIATIVE

Program/Project Management Initiative

Curriculum

The Program and Project Management Initiative (PPMI) is a NASA-wide program conducted by the Office of Human Resources and Education. It is designed to provide developmental opportunities to the NASA personnel who manage and support NASA programs and projects.

Classical educational/instructional techniques, as well as new education models, are used to enhance the business and technical management skills of the course participants with a 'NASA way' of conducting project management. To achieve these objectives, the curricula include core courses, skill courses and alternative instructional methods such as interactive video teleconferences. Under the initiative, support is available to intact project teams through tailored training and consulting services and knowledge capture activities. At NASA Headquarters, a Project Management Library is equipped to provide assistance to those interested in research and documentation on project management.

This section of the catalog describes the curricula offered to NASA personnel through PPMI. It explains the course objectives, who should attend, topics covered, course structure, instructional methods, instructors and course schedule. The Project Management and Advanced Project Management programs are held at the Management Education Center, Wallops Island, Virginia. The locations of other courses offered are indicated in the annual announcement of the schedule.

Nomination/Registration Process

The PPMI issues an annual calendar of scheduled training courses one year in advance. As new courses are developed, additional information and nomination requests are sent to training offices. Nominations must typically be made six to eight weeks before the beginning of each course in order to complete pre-course assignments. Nominations are processed by the Headquarters Training Office and coordinated with the PPMI staff at Headquarters.

PPMI courses are specifically for NASA employees. They are intended to provide enriching professional program and project management training not offered by other commercial, governmental, academic or residential training programs.

The Agency normally covers meals, lodging and instructor's costs; participant's organizations are responsible for transportation. For courses that are rotated among the NASA centers, out-of-town participants are responsible for per diem, transportation, and lodging costs. Local participants from the host center do not have any associated costs.

We welcome you to contact PPMI staff, Headquarters Training staff and past participants of PPMI courses.

Project Management (PM)

Description: The PM program is a ten-day program designed to provide early career exposure to the many skills and techniques used in the management of successful NASA projects. The course is offered three times a year at the Management Education Center. Sessions A and B are scheduled at least one month apart. Each session begins on Sunday afternoon and ends midday Friday.

Course Objective: To provide an introduction to the basic principles and techniques of project management as they are applied at NASA, including refining strengths and weaknesses, learning how to gain equitable contributions from project team members and goal setting.

Who Should Attend?: NASA personnel working at the subsystem level of a project who have little management experience and have

project management responsibilities for the first time. Typically, the participant is an engineer or scientist with five years of technical experience on NASA programs. Program size: 26 participants per session.

Objectives:
* The first five day session (A) covers **Planning** and **Organizing** activities and the second five-day session (B) focuses on **Directing** and **Controlling** activities.
* Interactive video teleconferences are conducted and assignments are completed between each session.
* Topics include:
  The NASA Framework
  Management Principles, Concepts and Theories
  Acquisition and Budgeting
  Management Tools and Techniques
  Contract Management
  Project Planning
  Program Control
  Leadership and Motivation
  Time Management
  Reporting and Documentation
  Problem Solving
  Decision Making
* A variety of teaching techniques are used, including lectures by experts in the field, presentations by senior NASA project managers and interactive case studies.

Prerequisite: None.

Length of Course: Ten days.

Frequency: Three times per year.

Cost: Agency funded.

Advanced Project Management (APM)

Description: The APM course is a ten-day program designed to provide mid-career project managers with an opportunity to reflect upon their experiences and to improve their project management skills. The program is held three times a year at the Management Education Center. Sessions A and B are scheduled at least one month apart. Each session begins on a Sunday afternoon and ends midday Friday. A follow-on course for all APM participants is held once a year to share lessons learned.

Course Objective: To provide in-depth training in the disciplines and techniques of project management as applied at NASA.

Who Should Attend?: NASA personnel working at the systems level of projects who have substantial project management experience. Typically, the participant is an engineer or scientist with more than 10 years on NASA programs, with recent experience in the management of those projects. Program size: 24 participants per session.

Objectives:
* The first five-day session (A) addresses project **Definition and Baseline.** The second five-day session (B) covers **Development and Operations.**
* Interactive video teleconferences are conducted and assignments are completed between each session.
* Topics include:
  NASA Project Life Cycle
  Project Planning and Control
  Systems Engineering
  Risk Analysis and SRM&QA
  Software Project Management
  Contract Management
  Scheduling
  Acquisition
  Cost Estimating
  Leadership and Personnel Management
  Operations Management
  Negotiations
* A variety of teaching techniques are used, including lectures, panel discussions, seminars, videotapes, case studies, interactive video presentations and guest speakers. The second week of this course emphasizes interactive classroom techniques and shared experiences sessions.

Prerequisite: None.

Length of Course: Ten days.

Frequency: Three times per year.

Cost: Agency funded.

Executive Project Management (EPM)

Description: The EPM is a three-day shared experiences colloquium designed to address a significant theme or issue in the field of program and project management.

Course Objective: To bring project managers together for the purpose of sharing ideas and experiences and to address current and future issues in program and project management.

Who Should Attend?: NASA personnel and their senior staff who have had extensive program and project management responsibilities and experience. Typical participants include project managers, deputy program and project managers, chief engineers and chief scientists. Program size: 75-100 participants per session.

Program Highlights:
- The global issues of project management in NASA and future directions.
- Presentations are made by aerospace specialists, OMB and Congressional staffers, professional and industry leaders and college and university professors.
- Small work groups are established to cover some topics in greater depth.
- Topics reflect the major current issues and opportunities at the time the program is conducted and may include:

    Current Management Trends International
    Cooperation
    Industry View of the Future
    Organization Structure for Programs &
    Projects
    Program Control
    Systems Engineering

Cooperative Programs
Human Resources

Prerequisite: None.

Length of Course: Three days.

Frequency: Varies.

Cost: Agency funded.

Program Managers' Seminar (PROGM)

Description: The PROGM course is a five-day program designed to provide an overview of the program management process used by NASA. The program is broken down into the following four phases:
- Phase A - Preliminary Analysis
- Phase B - Definition
- Phase C - Design
- Phase D - Development and Operations

Course Objective: To provide high-level, broad exposure to the organizational, budgetary and legislative issues involved in managing NASA programs.

Who Should Attend?: NASA program managers and support staff involved in managing agency programs. Program size: 30 participants per session.

Program Highlights:
- A case study that is followed throughout the week; lectures and exercises are interspersed with independent and group assignments.
- Instructors are NASA managers, NASA alumni, aerospace specialists and OMB and Congressional staffers.
- Topics include:
    NASA Goals and Strategic Plans
    Changing Role of the Program Manager
    Budget Process Review and Update
    Legal Issues in Advocacy and Ethics
    NASA's External Relationships
    Individual Self-Evaluation

Prerequisite: None.

Length of Course: Five days.

Frequency: Once per year.

Cost: Agency funded.

Contract and Subcontract Management Seminar (CSMS)

Description: The CSMS course is a five-day residential program held at the Management Education Center for contract specialists. The seminar is designed to explore current contract management topics relevant to NASA.

Course Objective: To provide an understanding of the material weakness affecting NASA in the areas of contract and subcontract management and to provide insight into cost-effective and productive contract management practices.

Who Should Attend?: NASA Contract specialists at the GS-09 through 12 level who are involved in contract management and who have taken a basic contract administration course. Program size: 28 participants per session.

Objectives:
- Discussion of GAO and IG current issues impacting NASA contract and subcontract management.
- An analysis of NASA contractor cost and performance system reports.
- In-depth discussions lead by senior NASA procurement officials on current NASA policy and approaches to improving contract and subcontract management.
- Discussion and case studies of current issues facing the contract specialist e.g., cost growth, delegations, excessive profits, COTR responsibility, subcontract consent and DoD roles.
- Additional topics include:
    Contractor purchasing system reviews
    Contract administration planning

Change order management
Post award conferencing
Technical and schedule compliance
CPSR process and reports
Contractor cost and performance reports

Prerequisite: None.

Length of Course: Five days.

Frequency: Twice per year.

Cost: Agency funded.

Source Evaluation Board (SEB)

Description: This five-day program provides a comprehensive overview of the SEB process employed in a major NASA procurement. Sessions are structured to expose participants to the full spectrum of Source Evaluation Board activities.

Course Objective: To provide an understanding of the Source Evaluation Board process and the tools and techniques associated with the process.

Who Should Attend?: NASA scientific, procurement and technical personnel who will serve on a Source Evaluation Board within six to 18 months from the time the course is offered. Program size: 32 participants per session.

Objectives:
- Lectures and exercises, including a week-long SEB simulation.
- Instructors are NASA alumni and professional trainers.
- Topics include:
    Overview of the SEB Process
    Evaluation of Cost Proposals
    Roles and Organization
    Conducting Discussions with Offerors
    Schedule
    Final Scoring
    Security
    Compiling BAFO Evaluation Results
    Contents of the SOW & Evaluation Factors

Writing the Selection Statement
Contents of RFP Sections L&M
Briefing the Source Selection Official
Initial Scoring of Proposals

Prerequisite: None.

Length of Course: Five days.

Frequency: Six times per year.

Cost: Agency funded.

Systems Engineering (SE)

Description: Systems Engineering refers to a series of center-based courses structured for NASA project personnel on the general topic of systems engineering. It describes, at a high level, the process for carrying out systems engineering through a project's life cycle. At present, there are at least three different courses being provided depending on the needs and desires of the sponsoring center:
• Focus on Phases A/B: Pittman & Associates (four days)
• Focus on Phases C/D: Center for Systems Management (CSM) (five days)
• Focus on Spacecraft Systems Engineering: JWF Engineering (four days)

Course Objective: To provide an understanding of the systems engineering process and the associated tools and techniques commonly used by systems engineers at NASA.

Who Should Attend?: NASA project personnel who are or will be heavily involved in the conduct of NASA scientific and engineering projects. The courses are ideal for those who have been recently assigned systems engineering responsibilities. These courses are also recommended for those involved in the early phases of NASA projects because they concentrate on the creative process of defining and planning a project. Typical participants are mid-level engineers and early career project managers. Program size: 30 participants per

session.

Program Highlights:
• Topics vary, depending on the specific session, but typically include need definitions, hierarchical analysis, information management, verification and validation, risk management, concept selection, implementation planning and technical oversight.
• Instruction is provided by lectures, panel discussions, case studies and problem-solving exercises.
• Sessions are provided at centers where the majority of participants are from the hosting center, however limited space is provided for participants from other centers.
• Some sessions are devoted to specific organizations/projects.

Prerequisite: None.

Length of Course: Four to five days.

Frequency: Varies.

Cost: Agency funded.

Program Control (PC)

Description: This course is designed to provide an overview of the life cycle of a project and what control functions are employed as the project progresses from the planning stage through implementation. The five modules of PC are offered at each Center and Headquarters at least once a year. The course may be presented with varying time frames, such as a continuous four days, or three days plus one the following week, or module by module. The time frame is determined by each NASA installation.

Course Objective: To present NASA and industry perspectives on the procedures used to plan and control resources during the life of a NASA program or project.

Who Should Attend?: NASA personnel who have program or project control

responsibilities. Typical participants include program analysts, budget analysts, procurement personnel and technical project personnel in or contemplating management, including project management. Program size: 24 participants per session.

Program Highlights:
• Topics typically included in the Program Control series include:
  Documentation and Data Management
  Program Planning and Control
  Configuration Management
  Plans and Requirements Acquisition Process
  Schedule Management
  Project Implementation Phase C/D
  Information Management
  Resource Management: Cost Estimating, Budget Process, Performance Measurement
• A variety of teaching methods are employed including lectures, lessons learned, case studies and problem solving techniques.

Prerequisite: None.

Length of Course: Varies.

Frequency: At least once per year.

Cost: Agency funded.

Construction of Facilities Management (CoF)

Description: The CoF course is a four and a half-day program held at a NASA center.

Course Objective: To promote an understanding of the NASA CoF process and to enhance CoF project management skills. The course will increase the effectiveness of CoF projects by assessing management and project tools and assist in the facilitating of communications within and between centers through the use of shared experiences.

Who Should Attend?: CoF project managers and senior staff with experience in

design or construction who are or will be involved in the management of CoF projects. Program size: 30 participants per session.

Program Highlights:
• An understanding of the NASA CoF process in order to improve effectiveness of the project manager.
• Definition and explanation of the roles, responsibilities and expectations of a CoF project manager.
• Modules presented include:
  Requirements   Design
  Planning   Construction
  Procurement   Project Activation
  Negotiations   Tools
  Legal Issues   Shared Experiences

Prerequisite: None.

Length of Course: Four and a half days.

Frequency: Twice per year.

Cost: Agency funded.

Task Management (TM)

Description: The TM course is a five-day residential program offered at a NASA training facility. Participants work together in teams of four or five on a task management simulation.

Course Objective: The objective of this program is to provide an understanding of management principles, tools and techniques for NASA personnel managing at the task level. Participants will learn about project management tools through discussion and a management simulation.

Who Should Attend?: Task managers, individuals managing tasks in staff and support organizations, who require an understanding of task management tools and procedures.

Program Highlights:
• Lectures, simulation, panel discussion and shared experiences.

- Instructors are NASA faculty.
- Topics include:
  - Management Principles
  - Directing Leadership
  - Controlling Communication
  - Staff/Line Responsibilities
  - Planning
  - Cost Estimating/Control
  - Organizing
  - NASA Management Tools
  - Work Breakdown Structures
  - Risk Management

Prerequisite: None.

Length of Course: Five days.

Frequency: Varies.

Cost: Agency funded.

Contract Analysis and Control for Project Management

Description: This is a nine-hour program presented by the Contractor Finance and Accounting Branch of the Financial Management Division, NASA Headquarters. The program is presented in three 3-hour installments and is offered on an as-requested, as available basis.

Course Objective: To provide an understanding of the NASA Contractor Financial Management Reporting System and basic analytical techniques applicable to the NASA Form 533 reports.

Who Should Attend?: Project managers, financial analysts, contracting officers, contracting officers' technical representatives, and others who have responsibilities which involve the development of NASA Contractor Financial Management Report (NASA Forms 533) requirements or the analysis of contractors' 533 reports. Program size: 25 to 30 participants per session.

Program Highlights:

- Lecture, group discussion and project team case studies.
- Instructors are NASA Headquarters Contractor Finance and Accounting Branch Staff.
- Topics include discussions on:
  - Procurement Cycle
  - Direct and Indirect Costs
  - NASA Contractor Financial Management Reporting System
  - NASA Form 533 Reporting Structures
  - Performance Measurement/Earned Value Concepts
  - Analysis of Contractors' 533 Reports
  - Contract Control

Prerequisite: None.

Length of Course: Nine hours.

Frequency: Varies.

Cost: Agency funded.

PPMI Videotapes

Description: The PPMI has a series of videotapes that summarize the experiences and lessons learned on various NASA programs and projects. The tapes highlight topics covered in the PPMI courses or focus on specific project management issues. The videotapes currently available from the Headquarters Learning Resource Center (see page A-3) are:

Multimission Module Spacecraft (MMS) Experience
Frank Cepollina, Project Manager for Satellite Servicing, Goddard Space Flight Center. Recorded November 1988.

Project Management from a Scientist's Perspective
Dr. Frank McDonald, Deputy Associate Director/Chief Scientist, Goddard Space Flight Center and former NASA Chief Scientist, 1983-1987. Recorded May 5, 1989.

Shared Experiences in NASA Projects
Angelo Guastaferro, Vice President, NASA

Space Flight Programs, Lockheed Missiles and
Space Company, Sunnyvale, CA. Recorded
April 21, 1989.

Experience In Managing Award Fee Contracts
William C. Keathley, Associate Director,
Programs, Goddard Space Flight Center.
Recorded March 9, 1989.

Shared Experiences In NASA Projects
A. Thomas Young, President and Chief
Operating Officer, Martin Marietta and Former
Center Director, Goddard Space Flight Center.
Recorded April 11, 1990.

H.
GENERAL MANAGEMENT SKILLS

General Management Skills

General management skills are categorized in four areas:
- Career Development Skills
- Time Management Skills
- Communication Skills
- Procurement Skills

Course descriptions for the above areas are included in the section which follows.

Career Development Skills

Managing Personal Growth

Description: MPG is a practical process which has been developed to help employees design and implement an action plan for personal growth in their current job--with the full support of their supervisor. The process includes:

- Skills inventory--Employees and supervisors independently rate the employee's strengths and developmental needs in relation to the skill requirements of the employees current job. (This effort takes approximately one to two hours to complete).

- MPG workshop--Employees attend the two day workshop during which they:
  --explore their PERSONAL VALUES to help determine what is important to them, what motivates them and what will give them the most job satisfaction.
  --assess their strengths and weaknesses in order to develop their personal SKILLS INVENTORY
  --decide where they want to improve and prepare a DEVELOPMENT DISCUSSION PLAN for a meeting with their supervisor.

- Development discussion--Employee and supervisor meet to discuss the employees personal growth. Both parties have the opportunity to discuss how they felt about the process, what may have surprised them and what actions they can take to improve the employee's skills and increase their job satisfaction.

Objectives:
- Provide a mechanism for employees to clarify their personal goals, values, skills, strengths and weaknesses--and how to use them to attain their career goals.
- Improve communications between supervisors and employees in a supportive and non-threatening way.
- Increase productivity of the organization through the increased job satisfaction of its employees.

Who Should Attend?: Open to all interested employees.

Prerequisite: None.

Length of Course: Two days.

Frequency: Approximately twice a quarter.

Cost: Headquarters General Activities funded.

Dealing With Difficult People

Description: Every day "difficult" people enter our lives and leave us frustrated, drained, and angry. Avoiding the "complainer" and other difficult people is impossible. The goal of the seminar is to help participants understand why these people act the way they do, offer better ways to reduce frustrations, and develop the strength to confront these difficult personality types in a nondestructive manner.

Objective:
- To provide practical steps and tested measures to relieve the stress and conflict encountered daily.

Who Should Attend?: Employees of all grades/occupations.

Prerequisite: None.

Length of Course: One day.

Frequency: Twice per year.

Cost: Headquarters General Activities funded.

Myers/Briggs Type Indicator

Description: The Myers/Briggs Type Indicator is an excellent management tool for understanding the differences in individual personalities and how these differences affect work relationships in the office environment. The skills learned in this course are transferable and equally relevant and helpful in personal relationships outside the workplace.

Objectives:
• Increase interpersonal knowledge.
• Facilitate team development.

Who Should Attend?: Employees as assigned.

Prerequisite: None.

Length of Course: One day.

Frequency: Six times per year

Cost: Headquarters General Activities funded.

Stress Management

Description: A comphrensive course which addresses the stress that we all face in our daily lives. Areas covered include work pressures, family and personal concerns, financial stress, health, and progressive relaxation.

Objectives:

• To decrease the negative effects of stress.
• To increase interpersonal skills.

Who Should Attend?: Employees of all grades/occupations.

Prerequisite: None.

Length of Course: One day.

Frequency: Twice per year.

Cost: Headquarters General Activities funded.

Time Management Skills

Franklin Time Management

Description: This course is designed to increase participant's ability to manage their time by setting objectives, considering values, and appropriately budgeting their time.

Objectives:
• To familiarize participants with time management principles.
• To familiarize participants with the Franklin Time Management tool.

Who Should Attend?: Employees as assigned.

Prerequisite: None.

Length of Course: Four hours.

Frequency: Once per month.

Cost: Code Specific funded.

Communication Skills

The written and oral communications courses listed below are designed to enhance the employee's ability to communicate to his or her

colleagues and to the general public, thus allowing for a smoother flow of information and a more professional image for the Agency.

Presenting Your Best

Description: A public speaking seminar for those individuals whose job requires them to make presentations. This seminar will assist participants in developing an awareness of their strengths and weaknesses in personal and public communications. This seminar does not try to change participants, but rather provides each individual with techniques and skills to develop his or her own unique style.

Who Should Attend?: Managers who make presentations.

Prerequisite: None.

Length of Course: Two days.

Frequency: Three times per year.

Cost: Headquarters General Activities funded.

Effective Guide to Good Grammar

Description: We have expanded our "Guide to Good Grammar" class from 20 to 32 hours. This will give participants more time for practice and focusing on individual needs. This basic grammar course is designed as a refresher to help participants reduce the grammatical mistakes in written communications which can hurt their organization's image. It will emphasize the correct, simple, and tactful way to express ideas both in speaking and in writing. (Also listed in Secretarial/Clerical, and Administrative Development Section).

Objectives:
• To learn how to use words and write sentences accurately.
• To learn to express ideas in a correct, simple, and tactful manner.
• To gain a thorough knowledge and

understanding of correct English usage.

Who Should Attend?: Anyone who would like to improve their grasp of grammar and proper pronunciation.

Prerequisite: None.

Length of Course: Four days.

Frequency: Approx. twice per year.

Cost: Headquarters General Activities funded.

Effective Listening

Description: This workshop will help participants enhance their work relationships and increase job productivity by developing effective active-listening skills. Participants will assess their listening styles and learn how this affects the communication process. In addition, participants will learn: active listening responses, barriers to effective communications, and the difference between listening and hearing.

Objectives:
• To learn the importance of listening skills and communication.
• To learn reasons to become a better listener.
• To learn how to become an effective listener.

Who Should Attend?: Any employee who would like to improve their listening skills.

Prerequisite: None.

Length of Course: Four hours.

Frequency: Approx. twice per year.

Cost: Headquarters General Activities funded.

Procurement Skills

The following courses are taught at Goddard Space Flight Center. Only a limited number of spaces are allocated to Headquarters employees.

Types of Contracts

Description: This seminar covers the various kinds of contracts used in the Federal procurement process. Seminar content includes elements of a contract, policies governing contract types, proper selection of contract type, and the impact of contract type on contract administration. Types of contracts discussed are firm-fixed-price, fixed-price incentive, cost and cost-sharing, cost-plus-award-fee, cost-plus-fixed-fee, requirements contracts, time and material, labor hour, and letter contracts. The recommended audience for this seminar is entry and junior level procurement personnel and other personnel interested in learning about the various contract types.

Who Should Attend?: Entry level procurement; technical and resources personnel.

Prerequisite: None.

Length of Course: One day.

Frequency: Three times per year

Cost: Headquarters General Activities funded.

Understanding Overhead and Other Indirect Cost Rates

Description: Obtaining a good understanding of a contractor's indirect cost rates is important for the preparation of Government price objectives and subsequent price negotiations. This course focuses on the development of indirect rates, how they are used, and how they fluctuate. Case studies and practical exercises will be used to illustrate the various concepts.

Who Should Attend?: Procurement and resources personnel.

Prerequisite: None.

Length of Course: Three days.

Frequency: Once per year.

Cost: Headquarters General Activities funded.

Advanced Cost and Price Analysis

Description: Advanced Cost and Price Analysis provides experienced personnel with practical applications to cost and price analysis. This course examines sources and uses of data, cost overruns, overriding audit information, applicability and use of cost accounting standards, pricing contract changes, and selected special topics. Case studies and class exercises will be used extensively in this course. This course is intended for mid and senior level procurement and resources personnel.

Who Should Attend?: Procurement and resources personnel.

Prerequisite: Basic cost and price analysis.

Length of Course: Five days.

Frequency: Once per year.

Cost: Headquarters General Activities funded.

Basic Contract Law

Description: An understanding of procurement regulations and basic legal concepts is essential for most contracting actions. Basic Contract Law includes: the history of federal procurement law, development and interpretation of the Federal Acquisition Regulation (FAR) and the NASA FAR Supplement, elements of a contract, application of legal principles, socioeconomic policies, performance issues and remedies, protests, disputes, and appeals. This course is intended for junior and mid-level procurement personnel.

Who Should Attend?: Junior and mid-level procurement personnel.

Prerequisite: Basic procurement.

Length of Course: Five days.

Frequency: Once per year.

Cost: Headquarters General Activities funded.

Technical Data and Computer Software Rights (Advanced)

Description: This seminar covers the policies and procedures relating to technical data and software in both proposals and deliverables under a contract. Special emphasis will be placed on the FAR and NASA FAR Supplement provisions and clauses. Registration in this seminar is restricted to mid and senior level procurement personnel.

Who Should Attend?: Mid-level and senior procurement personnel.

Prerequisite: Technical data, software and patent rights (basic).

Length of Course: One day.

Frequency: Once per year.

Cost: Headquarters General Activities funded.

Information Resources Procurement

Description: A course dealing specifically with the acquisition of information resources hardware, software, and services; both commercial or to be developed to suit NASA's requirements. Among the topics to be discussed are the regulations, such as the Federal Acquisition Regulation (FAR), NASA FAR Supplement, and the Federal Information Resources Management Regulation (FIRMR); requirements analysis; specifications and statements of work; solicitation and award; plus post award administration of information resources and contracts. This specialized course is designed for procurement and technical personnel integrally involved in the information resources acquisition process.

Who Should Attend?: Procurement and technical personnel.

Prerequisite: None.

Length of Course: Four days.

Frequency: Once per year.

Cost: Headquarters General Activities funded.

Advanced Negotiation Techniques

Description: Advanced Negotiation Techniques permits experienced negotiators to practice additional negotiation approaches and skills. Topics covered include oral and written discussions, determining responsibility, selection, negotiations, and debriefing unsuccessful offerors. Mock negotiation sessions are used to practice the various negotiation techniques.

Who Should Attend?: Mid and senior level procurement personnel.

Prerequisite: Basic negotiation techniques.

Length of Course: Five days.

Frequency: Once per year.

Cost: Headquarters General Activities funded.

Basic Contract Administration

Description: This course covers all of the areas necessary for effective contract performance, from the contract award through contract close-out. Basic contract law, objectives of contract administration, subcontract administration, monitoring contractor performance, contract modifications, quality assurance, required surveillance plans, disputes, and terminations are only part of what is covered in this detailed course. Basic Contract Administration is an intermediate level course for contract administrators and specialists.

Who Should Attend?: Junior and mid-level procurement personnel.

Prerequisite: Basic procurement.

Length of Course: Five days.

Frequency: Once per year.

Cost: Headquarters General Activities funded.

Advanced Contract Administration

Description: This course is designed to cover areas of contract administration where the most difficult problems arise. Course topics include: contract interpretation issues, post award exceptions taken to statements of work or specifications, delivery of defective items, monitoring and surveillance techniques, contractor employee liability and other service contract issues, denials of cost overruns, subcontracting administration, constructive changes, and contract claims.

Who Should Attend?: Mid- and senior-level procurement personnel.

Prerequisite: Basic contract administration.

Length of Course: Five days.

Frequency: Once per year.

Cost: Headquarters General Activities funded.

Basic Procurement

Description: An introductory course about the federal procurement process as it relates to NASA and Goddard. This course includes a general overview of procurement legislation, regulations, the Federal budget cycle, the procurement cycle, competition requirements, small purchases, sealed bidding, contract administration and close-out.

Who Should Attend?: Entry-level procurement personnel.

Prerequisite: None.

Length of Course: Sixteen three-hour

sessions.

Frequency: Twice per year.

Cost: Headquarters General Activities funded.

Basic Cost and Price Analysis

Description: From the view of both the government and the contractor, pricing is one of the key elements in most contract negotiations. Basic Cost and Price Analysis introduces basic pricing principles, including pricing definitions, the regulatory structure, cost and price analysis, direct and indirect costs, requirements for certified cost and pricing data, cost accounting standards, and audits.

Who Should Attend?: This 5-day course is intended for entry- and junior-level procurement personnel. Resources personnel may also find this course worthwhile.

Prerequisite: Basic procurement.

Length of Course: Five days.

Frequency: Once per year.

Cost: Headquarters General Activities funded.

Basic Procurement for Technical Officers

Description: A 5-day overview of the Federal procurement process taught from the Technical Officer's perspective. This call addresses the role of technical personnel in the contracting process, including responsibilities, limitations, and liabilities. Topics covered include the procurement process, acquisition planning, competition requirements, and developing the statement of work, specifications, and evaluation subfactors. Other subjects covered are evaluating technical proposals, understanding the contract clauses, monitoring contractor performance, contract modifications,

and remedies for poor performance or failure to perform.

Who Should Attend?: Technical personnel.

Prerequisite: None.

Length of Course: Five days.

Frequency: Twice per year.

Cost: Headquarters General Activities funded.

Government Property

Description: Seminar topics include the types and definitions of property, property clauses, reporting requirements, property delegations, contracts with on-site and off-site performance, and risk of loss or damage to Government property. This seminar is intended for procurement personnel; however, Contracting Officer's Technical Representatives for contracts that regularly provide Government property may also benefit by attending.

Who Should Attend?: Procurement and technical personnel.

Prerequisite: None.

Length of Course: Six hours.

Frequency: Once per year.

Cost: Headquarters General Activities funded.

Contract Administration for Contracting Officer's Technical Representatives (COTR'S)

Description: This specialized course for COTR'S and task monitors concentrates on post-award contract administration. Issues discussed in this comprehensive class include contract administration roles and

responsibilities, authority of the COTR, required surveillance plans, technical direction, quality control, monitoring contract employees, preventing personal services situations, contract payments, enforcing contractor compliance, constructive changes, contract modifications, and contract close-out.

Who Should Attend?: COTR's and task monitors.

Prerequisite: None.

Length of Course: Three days.

Frequency: Twice per year.

Cost: Headquarters General Activities funded.

Introduction to the FAR and NASA FAR Supplement

Description: This 2-day class covers the historical and regulatory background behind the Federal Acquisition Regulation (FAR) and NASA FAR Supplement. Specific topics covered include the development and maintenance of the FAR, important terminology and definitions, use of the FAR and NASA FAR Supplement, organizational structure and cross referencing of the regulation, filing the regulation, and obtaining deviations to the regulation. This class is intended for entry-level procurement personnel, purchasing agents, and clerical personnel who have not used the FAR and NASA FAR Supplement on a regular basis.

Who Should Attend?: Entry and junior level procurement personnel.

Prerequisite: None.

Length of Course: Two days.

Frequency: Once per year.

Cost: Headquarters General Activities funded.

Preparation of an Information Resources Procurement Request Package

Description: This seminar summarizes the procurement process for information resources purchases of hardware, software, and services outside the small purchase range. Seminar topics include regulatory requirements, requirement analysis, specifications and statements of work, evaluation subfactors, and information resources milestones. Other topics are software data rights acquisition, evaluating technical proposals, contact with prospective offers, and inspecting and accepting hardware services.

Who Should Attend?: This seminar is intended for technical personnel who initiate information resources procurement request packages.

Prerequisite: None.

Length of Course: Three hours.

Frequency: Once per year.

Cost: Headquarters General Activities funded.

Preparation of Statements of Work and Specifications

Description: The description of the Government's requirement for a supply or service is a key document in the procurement process. Developing and writing a clear, concise, and complete Statement of Work (SOW) and specifications are the main focus of this course. Important areas covered are describing the requirement, technical writing tips, SOW format, research and development SOW's, SOW"s and specifications for other supplies and services, and post SOW considerations. Examples are used to highlight key aspects of effective SOW's and

specifications.

Who Should Attend?: Anyone developing the above documents.

Prerequisite: None.

Length of Course: Two days.

Frequency: Three times per year.

Cost: Headquarters General Activities funded.

Profit/Fee Negotiation

Description: This seminar addresses the purpose of and the leverage created through appropriate profit or fee negotiations. Emphasis is placed on evaluating individual profit or fee factors using the NASA structured approach. Examples are used to illustrate the profit or fee calculation and subsequent negotiation of profit or fee.

Who Should Attend?: Entry- and junior-level procurement personnel will benefit from this seminar.

Prerequisite: Basic procurement.

Length of Course: Five hours.

Frequency: Once per year.

Cost: Headquarters General Activities funded.

Socioeconomic Programs-8(A) and Small Business Contracting

Description: This seminar focuses on the small business and 8(A) small disadvantaged set-aside programs, the functions and responsibilities of the Industry Assistance Section, and the impact of the Business Opportunity Development Reform Act; including provisions of competition on 8(a) procurements and contractor compliance with approved subcontracting plans.

Who Should Attend?: Procurement and technical personnel who desire an introduction or update about 8(a) and small business programs are the recommended audience for this seminar.

Prerequisite: None.

Length of Course: Two and a half hours.

Frequency: Once per year.

Cost: Headquarters General Activities funded.

Protests

Description: Protests by disappointed offerers and bidders complicate and disrupt Government procurement actions. This seminar addresses the areas of major concern for procurement personnel and technical personnel, such as timely resolution of a protest, suspension of contract performance, inability to make an award, access of a protester to agency records, protests involving the procurement of information resources procurement, and ways to reduce the chances of a protest.

Who Should Attend?: All procurement personnel and technical personnel involved in the procurement process.

Prerequisite: None.

Length of Course: Three hours.

Frequency: Twice per year.

Cost: Headquarters General Activities funded.

Source Evaluation Board (SEB) Training Course

Description: This comprehensive course

covers the concept of SEB operations; the SEB organization and its responsibilities; the relationship of the statement of work, evaluation plan, request for proposal, and the contractor's proposal; the evaluation and scoring process; SEB presentations; and source selection. Course attendees participate in simulated SEB proceedings which include writing an evaluation plan, evaluating proposals, briefing Source Selection Official, and preparing a SEB report.

Who Should Attend?: Enrollment in this course is limited to mid- and senior-level technical, scientific, procurement, or resources personnel expected to perform SEB-related duties in the next 12 to 18 months.

Prerequisite: None.

Length of Course: Five days.

Frequency: Once per year

Cost: Headquarters General Activities funded.

Small Purchases for Purchasing Agents

Description: This is a basic course about procuring services or supplies of $25,000 or less and items available under General Services Administration Schedules, using simplified purchase procedures. Topics covered will be parts 8 and 13 of the Federal Acquisition Regulation (FAR) and NASA FAR Supplement, required sources of supply, open market purchases, small business requirements, synopsis requirements, request for quotations, information resources small purchases, contents of small purchases files, and administration of purchase orders and delivery orders.

Who Should Attend?: Purchasing agents.

Prerequisite: None.

Length of Course: Four days.

Frequency: Once per year.

Cost: Headquarters General Activities funded.

Technical Data, Software, and Patent Rights (Basic)

Description: This seminar introduces the various kinds of legal protection under trade secret, copyright, and patent laws for designing hardware and software, and the role these laws play in procuring such items either off-the-shelf or to be developed.

Who Should Attend?: Entry- and junior-level procurement personnel should attend this seminar. Enrollment in this seminar is limited to procurement personnel.

Prerequisite: None.

Length of Course: Two and one half hours.

Frequency: Once per year.

Cost: Headquarters General Activities funded.

The Technical Evaluation and Analysis Process

Description: The evaluation and analysis of a proposal is highly dependent on the evaluation factors, subfactors, and elements developed during the initial stage of the requirement. This seminar covers the above topic, as well as why proposals are evaluated. Other topics include an overview of the negotiated procurement process, security considerations, evaluation instructions, initial evaluation of proposals, scoring, the technical evaluation report, and final evaluation. Negotiated, competitive procurements which are over $25K, but less than $25 M, are the focus of this training; however, procurements processed by the Center ADP Procurement Branch are not covered by this seminar.

Who Should Attend?: The recommended audience for this seminar is technical personnel, but procurement personnel may also find it beneficial. Enrollment in this seminar is restricted to personnel with a working knowledge of the negotiated procurement process.

Prerequisite: None.

Length of Course: Six hours.

Frequency: Twice per year.

Cost: Headquarters General Activities funded.

I.
SECRETARIAL/CLERICAL SKILLS

Secretarial/Clerical Skills

The courses listed below are comprehensive and skill-based. They are designed to enhance, develop, and maintain technical, professional, and office skills.

Secretarial, Clerical and Administrative Support Orientation

Description: This orientation program assists newly hired NASA HQ employees in the secretarial, clerical, and administrative support field to effectively perform their duties in a professional and efficient manner. Areas covered include: NASA and its Headquarters organizational structure and function, telephone techniques, effective work habits, communication skills, correspondence procedures, Government Printing Office Manual, administrative services, travel procedures, skills assessment and career planning.

Objectives:
- To be familiar with NASA HQ organizational structure, functions, and key officials.
- To develop a positive professional and personal image.
- To develop good work habits and improve communications skills.
- To assess skills and produce an Individual Development Plan.

Who Should Attend?: Any newly hired secretary, clerical, or administrative staff employee.

Prerequisite: None.

Length of Course: 20 hours.

Frequency: Approx. seven times per year.

Cost: Headquarters General Activities funded.

Effective Guide to Good Grammar

Description: We have expanded our "Effective Guide to Good Grammar" class from 20 to 32 hours. This will give participants more time for practice and for focusing on individual needs. This basic grammar course is designed as a refresher to help participants reduce the grammatical mistakes in written communications which can hurt an organization's image. It will emphasize the correct, simple, and tactful way to express ideas in both writing and speaking.

Objectives:
- To learn how to use words and write sentences accurately.
- To learn to express ideas in a correct, simple, and tactful manner.
- To gain a thorough knowledge and understanding of correct English usage.

Who Should Attend?: Anyone who would like to improve their grasp of grammar and proper pronunciation.

Prerequisite: None.

Length of Course: Four days.

Frequency: Twice per year.

Cost: Headquarters General Activities funded.

Telephone Techniques

Description: Helpful skills in using the telephone as an effective means of communication are taught in this workshop. Skills are presented through practical exercises, case studies, and simulated telephone practice. Emphasis is placed on diction, voice quality, and proper office etiquette.

Objectives:
• To use the telephone to create a positive and professional office image.
• To handle telephone inquiries, irate callers and problem callers.
• To improve telephone personality and image.
• To improve telephone etiquette and techniques.

Who Should Attend?: Anyone whose job responsibilities include answering the telephone.

Prerequisite: None.

Length of Course: Four hours.

Frequency: Approx. twice per year.

Cost: Headquarters General Activities funded.

Proofreading Skills

Description: The purpose of this course is to teach a systematic and effective way of looking at a text for the specific purpose of discovering and correcting errors. Participants will learn proofreading marks, review punctuation, capitalization, spelling, and word division. A solid background in basic grammar is required for this course.

Objectives:
• To learn to proofread typed material quickly.
• To increase the ability to detect errors when proofreading.
• To improve basic proofreading skills: punctuation, capitalization, word division, and abbreviation styles.

Who Should Attend?: Any NASA employee whose responsibilities include: typing, editing, and/or proofreading.

Prerequisite: None.

Length of Course: Two days.

Frequency: Approx. twice per year.

Cost: Headquarters General Activities funded.

Correspondence Preparation and Procedures

Description: This workshop will serve as a refresher course for secretaries and clerical support staff who would like to learn how to better prepare HQ correspondence.

Objectives:
• Enhance the quality of correspondence preparation.
• To reinforce standards of preparing correspondence.
• To share current policies concerning the preparation of correspondence.

Who Should Attend?: Any employee who prepares official correspondence.

Prerequisite: None.

Length of Course: Four hours.

Frequency: Approx. twice per year.

Cost: Headquarters General Activities Funded.

Travel Procedures and Preparations

Description: The purpose of this workshop is to teach people NASA's travel rules and regulations.

Objectives:
• To help employees make better use of administrative services.
• To help develop a clearer understanding of travel services and procedures.
• To serve as a refresher course and review the

preparation of travel orders and vouchers.

Who Should Attend?: Any NASA employee whose responsibilities include preparing travel orders or vouchers.

Prerequisites: None.

Length of Course: Four hours.

Frequency: Approx. once per year.

Cost: General Activities Headquarters funded.

Office Management for Secretaries

Description: This workshop is designed to increase the overall productivity and efficiency of secretaries through better self management and utilization of support staff with whom they interact. Particular emphasis will be placed on developing skills and confidence levels necessary to handle leadership responsibilities.

Objectives:
- To understand the role of the lead secretary.
- To identify and develop office management skills.
- To understand the basic function of management.
- To communicate more effectively in the office environment.

Who Should Attend?: Any secretary who would like to improve communication and organized skills.

Prerequisite: None.

Length of Course: Two days.

Frequency: Once per year.

Cost: Headquarters General Activities funded.

Speaking with Confidence

Description: This workshop is designed for those who would like to improve their communication abilities. Whether one is communicating with a co-worker, boss, or a group of people, it is essential that ideas are transferred effectively. This course will give participants the opportunity to practice both personal and public speaking. Participants will learn how to better communicate their ideas and articulate their thoughts.

Objectives:
- To learn grammar techniques, increase marketability, enhance your professional image and unlock your speaking potential.
- To stress and potentially improve participants' communication skills.
- To begin the elimination of old faulty habits and focus on the ease of articulation.
- To focus on dialectal differences between standard and non-standard dialects.

Who Should Attend?: Anyone who would like to improve their communication abilities and learn how to articulate their thoughts.

Prerequisite: None.

Length of Course: One day.

Frequency: Approx. twice per year.

Cost: Headquarters General Activities funded.

Time Management for Secretaries

Description: This action filled workshop will provide time and work management techniques needed to develop skills for increasing overall performance and productivity.

Objectives:
- To analyze and assess your use of time on and off the job.

- To identify ways to effectively plan and schedule work.
- To learn good time management techniques.
- To identify and eliminate time wasted.

Who Should Attend?: Any secretary or clerical employee who would like to manage time more effectively.

Prerequisite: None.

Length of Course: One day.

Frequency: Approx. once per year.

Cost: Headquarters General Activities funded.

Performance, Opportunity, and Professionalism Seminar (POPS)

Description: This residential program enables secretaries and clerical employees to enhance skills and improve communications. Topics include: team-building, professionalism, and interpersonal communication skills.
Objectives:
- To understand the role of secretaries/administrative support personnel in the NASA organization.
- To identify the characteristics of professionalism and examine individual strengths and development needs in this area.
- To practice and plan to use techniques to improve communications in the work setting.
- To develop and practice a strategy for reporting on mutual interests to your supervisor.

Who Should Attend?: All full-time permanent employees in secretarial or clerical positions who have worked at HQ for at least 1 year are eligible.

Prerequisite: None.

Length of Course: Three days.

Frequency: Approx. once per year.

Cost: Headquarters General Activities funded.

Team Building Workshop

Description: This off-site workshop is held as a follow-up to the POPS Residential Program. It allows participants of POPS and their supervisors to work together and have an opportunity to communicate and clarify work-related issues, and identify ways both might improve their work situation.

Objectives:
- To build a stronger team relationship.
- To discuss elements essential to team success.
- To gain insight into why people behave as they do.
- To learn to handle conflict.

Who Should Attend?: Participants of POPS and their supervisors.

Prerequisite: Attendance of POPS.

Length of Course: Four hours.

Frequency: Approx. once per year.

Cost: Headquarters General Activities funded.

Division-Level Secretary Retreat

Description: This workshop is designed to meet the special needs of the division secretary at NASA HQ. Participants will enhance knowledge and skills that will help them to increase their performance and job satisfaction.

Objectives:
- To develop a better understanding of the role of the division secretary.
- To prepare for new challenges and responsibilities.
- To learn to communicate effectively with co-workers for support and cooperation.
- To learn to work more effectively as a team with

managers and other co-workers.

Who Should Attend?: Division-level secretaries.

Prerequisite: None.

Length of Course: Two days.

Frequency: Once per year.

Cost: Headquarters General Activities funded.

Executive Secretary Retreat

Description: This off-site workshop is designed for executive level secretaries who would like to enhance knowledge and skills that will help them to increase professionalism, performance, and job satisfaction. Content varies each year to target timely subjects.

Objectives:
- To enhance their professional image and their job.
- To understand the major source of power and learn to project power, authority, and credibility.
- To understand the impact of their communication style.

Who Should Attend?: Any secretary at the administration, assistant or associate administrator level.

Prerequisite: None.

Length of Course: Two days.

Frequency: Once per year.

Cost: Headquarters General Activities funded.

Interpersonal Communication for Administrative Support Personnel

Description: This workshop is designed to help participants improve their personal and organizational effectiveness through a better understanding of human relations and communications in the office. Topics included are: how to influence and persuade, how to give clear instructions and make requests that are clearly understood.

Objectives:
- To learn to say what what you mean in a clear, concise way without sounding abrupt.
- To learn to differentiate between communication styles.
- To understand how your communication style impacts on the kind of environment you create around you.

Who Should Attend?: Any administrative support person who would like to improve their communication and interpersonal skills.

Prerequisite: None.

Length of Course: Two days.

Frequency: Once per year.

Cost: Headquarters General Activities funded.

Assertive Communications for Administrative Support Staff-New

Description: Understood and applied correctly, assertive behavior will make employees better communicators, help to reduce stress, and will assist them in gaining greater respect and recognition as a professional. Increasing assertiveness will also boost performance by giving them the confidence to take charge and maintain control over themselves and their situation. This

intensive 1-day course will provide a supportive environment for learning and practicing appropriate and effective techniques for assertive communication. Participants will learn to think assertively, feel confident, and behave in a positive manner.

Objectives:
• To identify the three (3) behavioral styles.
• To identify and develop "healthy" verbal/non-verbal assertive behavior and skills.
• To assess personal behavior on the assertiveness scale.

Who Should Attend?: Any employee who would like to enhance their communication skills by being more assertive.

Prerequisite: None.

Length of Course: One day.

Frequency: Once per year.

Cost: Headquarters General Activities funded.

Building Management and Administrative Skills

Description: This workshop will help participants gain a better understanding of the organizational, management, and administrative aspects of their jobs. It will also show them how to use effective problem-solving techniques.

Objectives:
• To better understand management and staff expectations.
• To better understand the role and function of the administrative support staff.
• To discuss major challenge.
• To identify skills necessary for on-the-job success.
• To develop an understanding of the management process.

Who Should Attend?: Any employee in the administrative field who would like to enhance

their management and communication skills.

Prerequisite: None.

Length of Course: Two days.

Frequency: Once per year.

Cost: Headquarters General Activities funded.

Time Management for Administrative Support Staff

Description: This action-filled workshop will provide time and work management techniques needed to increase overall performance and productivity.

Objectives:
• To learn how to manage time more effectively.
• To learn to concentrate on work items that give you the best return.
• To learn how to be more effective and efficient.
• To learn how to develop good time-saving tips.

Who Should Attend?: Any administrative support staff person who would like to improve their time management skills.

Prerequisite: None.

Length of Course: One day.

Frequency: Once per year.

Cost: Headquarters General Activities funded.

Administrative Support Staff Retreat

Description: This program is designed to help participants achieve excellence on the job. It begins with developing confidence and self-esteem and moves toward those skills and attitudes necessary to interact effectively with others. It emphasizes communication and

interpersonal skills.

Objectives:
- To identify and enhance skills needed for increase productivity.
- To define the role of administrative support personnel in the NASA organization.
- To learn ways to better organize time and work.
- To learn ways to achieve excellence on the job and personally.

Who Should Attend?: Administrative Support Staff.

Prerequisite: None.

Length of Course: Three days.

Frequency: Once per year.

Cost: Headquarters General Activities funded.

Strategies to Enhance Your Career

Description: This fast-paced workshop is about self-empowerment for today's career-minded individual. Participants will learn skills that will help to win recognition and experience satisfaction, and learn techniques to assess their skills and to present ideas with greater impact.

Objectives:
- To learn strategies that will help you to take charge of your life and advance your career.
- To learn to set goals and action plans.
- To understand the importance of networking to career success.
- To become acquainted with proven goal achievement techniques.
- To show participants techniques which will help them to receive recognition for their accomplishments.

Who Should Attend?: Any employee who would like to develop a plan for their career advancement.

Prerequisite: None.

Length of Course: Two days.

Frequency: Once per year.

Cost: Headquarters General Activities funded.

Effective Listening

Description: This workshop will help participants enhance their work relationships and increase job productivity by developing effective active listening skills. Participants will assess their listening styles and learn how this affects the communications process. In addition, participants will learn: active listening responses, barriers to effective communications, and the difference between listening and learning.

Objectives:
- To learn the importance of listening skills and communication.
- To learn reasons to become a better listener.
- To learn how to become a better listener.

Who Should Attend?: Any employee who would like to improve their listening skills.

Prerequisite: None.

Length of Course: Four hours.

Frequency: Once per year.

Cost: Headquarters General Activities funded.

Quality Customer Service: Key to Excellence

Description: This intensive workshop is designed to train members of service organizations to be service-driven and customer friendly. Its major emphasis is on ensuring "customer service excellence." Participants will learn that it is the little differences that make ALL

the difference.

Objectives:
- To learn the difference between "customer service" and "customer service excellence."
- To learn people skills that are necessary for "customer service excellence."
- To learn to establish trust and rapport with the customer.
- To learn how to create a positive initial contact with the customer.

Who Should Attend?: Any NASA employee whose job is to provide services to other NASA employees or to the public.

Prerequisite: None.

Length of Course: Eight hours.

Frequency: Once per year.

Cost: Headquarters General Activities funded.

Developing a Professional (Success) Image

Description: The POWER of an IMAGE cannot be denied . . . The mental picture you have of yourself has a tremendous impact on what you present to others and on your performance. This one day course is designed to promote change and development. It deals with the total image (internal and external). The program provides for maximum participant involvement. Learning will be reinforced through lecture, modeling (examples) practice, small and large group discussion, and visual aids.

Objectives:
- To better understand what it means to be a "professional."
- To identify professional traits.
- To learn what constitutes professional behavior.
- To identify and project your best qualities.

Who Should Attend?: Any employee who

would like to develop a more positive and professional image.

Prerequisite: None.

Length of Course: One day.

Frequency: Approx. once per year.

Cost: Headquarters General Activities funded.

J.
GENERAL COMPUTER SKILLS
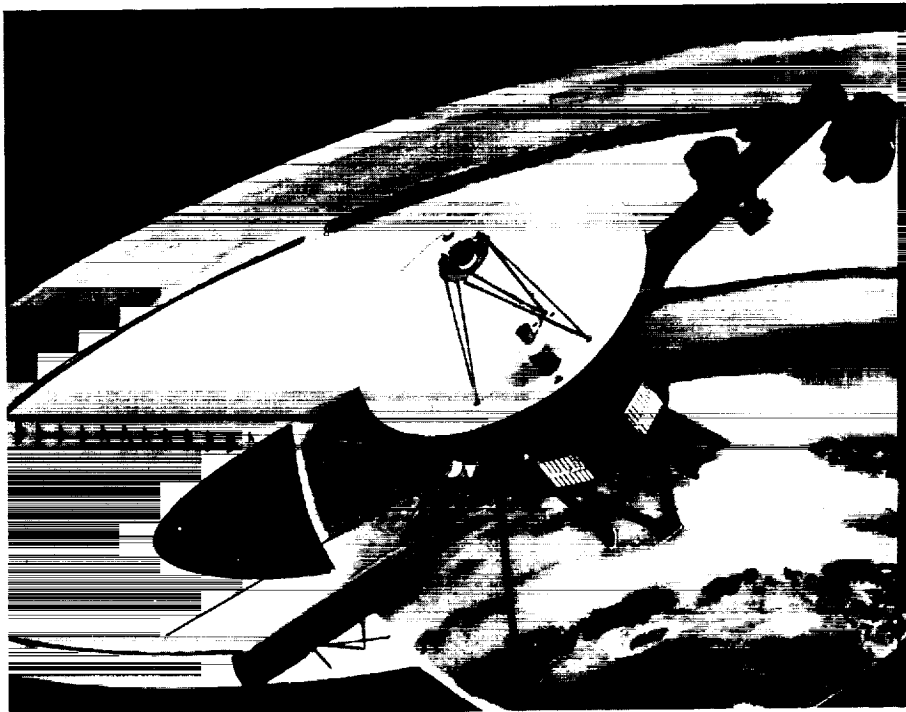
Computer Training Center Courses

The computer training courses listed below represent an extensive offering of courses from the most used software at NASA Headquarters. These courses are free to the employees, and offered on a regular basis. For registration information see page A-3 or contact the Computer Training Center at 453-8108.

dBase III+ Indexing   IBM

Description: The course covers sorting data in dBase III+ through indexing.The student will create and manipulate single and multiple indexes. It also covers date functions and querying commands.

Objectives: At the completion of this course the student will be able to:
• Create one or more index files to sort data in a database
• Query a database
• Use date functions

Who Should Attend?: Any Headquarters employee.

Prerequisites: Introduction to dBase III+

Length of Course: 3 hrs

Frequency: Quarterly

Cost: Headquarters General Activities funded.

Introduction to dBase III+   IBM

Description: This course introduces the student to the basic concepts and uses of a database. The student will create, modify and print a database structure. The course also covers data entry, calculations, editing, and querying the database.

Objectives: At the completion of this course the student will be able to:
• Define database, record, field, and file
• Create, modify, and print a simple database structure
• Enter records in a database
• Edit records in a database
• Query a database

Prerequisites: Introduction to the PC

Length of Course: 6 hrs

Frequency: Bimonthly

Cost: Headquarters General Activities funded.

dBase III+ Reports   IBM

Description: This course covers the steps necessary to create reports with dBase III+. The student will design a report form using conditions, indexes, and functions. The student will also write a short program to print a report.

Objectives: At the completion of this course the student will be able to:
• Create and print a report from database
• Create conditions and functions
• Write a simple program to print a report

Prerequisites: Introduction to dBase III+

Length of Course: 3 hrs

Frequency: Quarterly

Cost: Headquarters General Activities funded.

Introduction to Batch Files DOS 3.3   IBM

Description: This class is an introduction to

batch file programming. The student will explore the autoexec.bat file and create several batch files using simple DOS commands. The student will also create batch files using variables.

Objectives: At the completion of this course the student will be able to:
• Create simple batch files
• Modify the autoexec.bat file
• Create batch files with variables

Prerequisites: Hard Disk Navigation

Length of Course: 3 hrs

Frequency: Quarterly

Cost: Headquarters General Activities funded.

DOS 3.3 Basics IBM

Description: This course covers the basic uses of the MSDOS operating system. The student will boot the computer; display, copy, and delete files; format a new disk; and backup to and restore files from a hard disk. The course also covers other useful DOS commands.

Objectives: At the completion of this course the student will be able to:
• Display a list of files
• Copy and delete files
• Backup files on a floppy disk and restore them to a hard disk
• Format a blank disk

Prerequisites: Introduction to the PC

Length of Course: 3 hrs

Frequency: Monthly

Cost: Headquarters General Activities funded.

Hard Disk Navigation for DOS 3.3 IBM

Description: This course covers the directory structure of the hard disk in the MS-DOS computer. The student will explore an existing structure and create a new one. The course also covers the path command.

Objectives: At the completion of this course the student will be able to:
• Create and delete directories and subdirectories
• Move from one directory to another
• Create, use, and modify a path

Prerequisites: DOS Basics

Length of Course: 3 hrs

Frequency: Monthly

Cost: Headquarters General Activities funded.

Introduction to the PC with DOS 3.3 IBM

Description: This class will introduce the student to the Personal Computer. Topics include the microcomputer's hardware components and their functions as well as operating system software and it's function. The student will perform basic DOS commands for file management.

Objectives: At the completion of this course the student will be able to:
• Define computer
• Identify the main hardware components of a computer system
• Identify the three main types of software
• Use basic DOS commands

Prerequisites: None

Length of Course: 6 hrs

Frequency: Monthly

Cost: Headquarters General Activities funded.

Introduction to Windows 3.0
IBM

Description: This course is an introduction to the use of Windows with DOS. The course covers the manipulation and use of windows, icons, menus, and a mouse. The student will manage files and disks through the use of these tools. The student will also use the windows accessories - Notepad, Calculator, Cardfile, Calendar, Clock, Write, and Paintbrush.

Objectives: At the completion of this course the student will be able to:
• Use the tools of windows, mouse,windows,icons, and menus to access commands
• Copy, erase, and move files
• Create and delete directories
• Use the Windows accessories

Prerequisites: Introduction to the PC, DOS Basics

Length of Course: 3 hrs

Frequency: Bimonthly

Cost: Headquarters General Activities funded.

Paradox 3.5

Description: This course introduces the student to the basic concepts and uses of a database. The student will create, modify and print a database structure. The course also covers data entry, calculations, editing, and querying the database.

Objectives: At the completion of this course the student will be able to:
• Define database, record, field, and file
• Create, modify, and print a simple database structure
• Enter records in a database
• Edit records in a database
• Query a database

Prerequisites: Introduction to the PC

Length of Course: 6 hrs

Frequency: Bimonthly

Cost: Headquarters General Activities funded.

Harvard Graphics 3.0

Description: Concepts of presentation graphing will be explored to give students an appreciation for how graphics may be used for effective communication. Students will learn how to create object-orientated drawings, work with symbols and a variety of charts, such as text, pie, bar, line, and customized charts.

Objectives:
• To create, edit, and save drawings, charts, and graphs.
• To import data from spreadsheets.

Prerequisites: Introduction to the PC

Length of Course: 6 hrs

Frequency: Monthly

Cost: Headquarters General Activities funded.

Introduction to Freelance 3.0
IBM

Description: This course introduces the student to presentation package Freelance 3.0. The student will use the drawing commands to create graphics, create charts, link a chart to a spreadsheet, enhance the chart with text, and combine a group of charts into a portfolio.

Objectives: At the completion of this course the student will be able to:
- Draw simple graphics
- Create and enhance charts
- Link a chart to spreadsheet data
- Create a simple presentation

Prerequisites: Introduction to the PC

Length of Course: 6 hrs

Frequency: Quarterly

Cost: Headquarters General Activities funded.

Lotus 123 Version 2.3 Advanced Techniques   IBM

Description: In this course the student will assign range names to groups of cells, use Lotus 123's built in functions, perform date arithmetic, and sort data. The course also covers cell and worksheet protection.

Objectives: At the completion of this course the student will be able to:
- Assign and use range names
- Use functions to perform calculations
- Enter dates and perform date arithmetic
- Sort a list

Prerequisites: Introduction to Lotus 123

Length of Course: 3 hrs

Frequency: Quarterly

Cost: Headquarters General Activities funded.

Lotus 123 Version 2.3 Graphics IBM

Description: This course covers the creation of graphs in Lotus 123. The student will create, save, and retrieve a graph. The course also includes the selection of graph type,

enhancement of graphs, and printing graphs with Always.

Objectives: At the completion of this course the student will be able to:
- Create a graph from spreadsheet data
- Select a specific type of graph to represent data
- Enhance a graph with text and graphics
- print a graph

Prerequisites: Introduction to Lotus 123

Length of Course: 3 hrs

Frequency: Quarterly

Cost: Headquarters General Activities funded.

Introduction to Lotus 123 Version 2.3   IBM

Description: This course covers the concepts and basic uses of Lotus 123. The student will create, save, retrieve, and print a worksheet. The course also covers formula creation, copy and move commands, and formatting a worksheet.

Objectives: At the completion of this course the student will be able to:
- Create, save, retrieve, and print a spreadsheet
- Enter values and labels In a spreadsheet
- Create simple formulas to calculate data
- Move and copy data
- Format values and labels

Prerequisites: Introduction to the PC

Length of Course: 6 hrs

Frequency: Monthly

Cost: Headquarters General Activities funded.

Lotus 123 Version 2.3 Macros
IBM

Description: This course introduces the student to the macro feature of Lotus 123. The student will create simple macros directly and through the learn feature. The course also covers debugging a macro and saving macros in the worksheet and library.

Objectives: At the completion of this course the student will be able to:
• Create, save, and run simple macros
• Create interactive macros
• Edit a macro
• Manage macros in computer memory

Prerequisites: Lotus 123 Advanced Techniques

Length of Course: 3 hrs

Frequency: Quarterly

Cost: Headquarters General Activities funded.

Lotus 123 Version 2.3 Printing with Allways   IBM

Description: This course covers the features of the Allways program that comes with version 2.2 of Lotus 123. The student will format a worksheet with fonts, lines, shading, and color. The course also includes page breaks, copying formats, headers and footers, and printing a graph with the worksheet.

Objectives: At the completion of this course the student will be able to:
• Print a worksheet and a graph using the Allways Add-in
• Enhance the printout

Prerequisites: Introduction to Lotus 123

Length of Course: 3 hrs

Frequency: Quarterly

Cost: Headquarters General Activities funded.

Introduction to LetterPerfect 1.0 IBM

Description: This class introduces the student to the basic functions of LetterPerfect. The student will create, edit, save, retrieve, and print a document. The course also covers the use of codes to change margins, set tabs, and add headers and footers.

Objectives: At the completion of this course the student will be able to:
• Create, save, edit, retrieve,and print a document
• Change top, bottom, right, and left margins
• Set tabs
• Number pages
• Add a header and a footer

Prerequisites: Introduction to the PC

Length of Course: 6 hrs

Frequency: Quarterly

Cost: Headquarters General Activities funded.

WordPerfect 5.1 Desktop Publishing   IBM

Description: This class covers the Desktop Publishing features of WordPerfect 5.1. They include font selection, creating columns, drawing lines, importing graphics, and creating text boxes.

Objectives: At the completion of this course the student will be able to:
• Change the font of printed text
• Create columns for text
• Import graphics into a document

• Draw vertical and horizontal lines

Prerequisites: Introduction to WordPerfect
5.1

Length of Course: 3 hrs

Frequency: Bimonthly

Cost: Headquarters General Activities funded.

Introduction to WordPerfect 5.1
IBM

Description: This course covers the basic
concepts of WordPerfect. The student will
create a short document, save the document,
retrieve the document, and print the document.
The student will also change margins, set tabs,
and create a footer. Other topics include page
numbering and character formatting.

Objectives: At the completion of this course
the student will be able to:
• Create, edit, save, retrieve, and print a
  document
• Change default margins
• Set tabs
• Number pages
• Create headers and footers

Prerequisites: Introduction to the PC

Length of Course: 6 hrs

Frequency: Monthly

Cost: Headquarters General Activities funded.

WordPerfect 5.1 Macros   IBM

Description: This course introduces the
student to WordPerfect Macros. The student will
create and edit some useful macros. The course
also covers interactive macros and alternate
keyboards.

Objectives: At the completion of this course
the student will be able to:
• Create and use a simple macro
• Edit a macro
• Add interactive commands to macros

Prerequisites: Introduction to WordPerfect
5.1

Length of Course: 3 hrs

Frequency: Bimonthly

Cost: Headquarters General Activities funded.

WordPerfect 5.1 Merging   IBM

Description: This course is an introduction to
the merge features of WordPerfect. The student
will create a primary and secondary file and
merge them into a form letter. The student will
also sort the data in the secondary file and use a
merge to create mailing labels.

Objectives: At the completion of this course
the student will be able to:
• Create a secondary file (the data list for a form
  letter)
• Create a primary file (the letter for the merge)
• Merge a secondary and primary file into a   .
  merge document
• Sort a secondary file

Prerequisites: Introduction to WordPerfect
5.1

Length of Course: 3 hrs

Frequency: Bimonthly

Cost: Headquarters General Activities funded.

WordPerfect 5.1 Tables   IBM

Description: The course covers the table
feature in WordPerfect. The student will create a
table and enter text and numbers. The student

will enhance the table with shading, lines, alignment, and width and height adjustments. Other topics include math operations and the sort feature.

Objectives: At the completion of this course the student will be able to:
- Create a table
- Enhance a table with shading and width adjustments
- Perform math operations in a table

Prerequisites: Introduction to WordPerfect 5.1

Length of Course: 3 hrs

Frequency: Bimonthly

Cost: Headquarters General Activities funded.

Introduction to Word for Windows 1.0 IBM

Description: This course covers the concepts and basic uses of Word for Windows. The student will create, edit, save, and print a short document. The course also includes page and character formatting, and headers and footers.

Objectives: At the completion of this course the student will be able to:
- Create, edit, save, retrieve, and print a document
- Change default margins
- Change character fonts
- Create headers and footers

Prerequisites: Introduction to Windows 3.0

Length of Course: 6 hrs

Frequency: Quarterly

Cost: Headquarters General Activities funded.

Mac Orientation MAC

Description: The course is an introduction to using the Macintosh. The student will manipulate windows and icons, copy and move files, create folders, format a new disk, and delete files. The course includes a short introduction to word processing, spreadsheet, and drawing application programs on the Macintosh.

Objectives: At the completion of this course the student will be able to:
- Identify the parts of a window
- Copy, delete and move files
- Format a disk
- Create a file storage system with folders

Prerequisites: None

Length of Course: 3 hrs

Frequency: Monthly

Cost: Headquarters General Activities funded.

Introduction to MacDraw II MAC

Description: This course covers the concepts and basic uses of MacDraw II. The student will create objects, select, and manipulate them. The course also covers the use of grids to align objects and the integration of text into the drawings.

Objectives: At the completion of this course the student will be able to:
- Create, edit, save, retrieve, and print a simple drawing
- Use grids to align objects
- Add text to a drawing

Prerequisites: Introduction to the Macintosh

Length of Course: 3 hrs

Frequency: Quarterly

Cost: Headquarters General Activities funded.

Persuasion 2.0 Graphs   MAC

Description: This course covers the graph drawing features of the presentation application, Persuasion 2.0. The student will explore the parts of a graph as well as the different types of graphs that Persuasion creates. The student will create and enhance a column and pie graph. The student will also create a table.

Objectives: At the completion of this course the student will be able to:
• Create graphs for a Persuasion presentation
• Create tables for a Persuasion presentation

Prerequisites: Introduction to Persuasion 2.0

Length of Course: 3 hrs

Frequency: Quarterly

Cost: Headquarters General Activities funded.

Introduction to Persuasion 2.0 MAC

Description: This course introduces the basic concepts and uses of Persuasion 2.0. The student will create a slide presentation using an outline, a master slide, graphic objects, and text. The course also covers organization charts, the slide sorter, speaker's notes, and audience handouts.

Objectives: At the completion of this course the student will be able to:
• Create, edit, save, retrieve, and print a slide presentation
• Create a Master slide
• Create an outline for a presentation
• Import and create graphics for slides
• Create speaker's notes and audience handouts

Prerequisites: Introduction to the Macintosh

Length of Course: 6 hrs

Frequency: Quarterly

Cost: Headquarters General Activities funded.

Introduction to PowerPoint 2.01 MAC

Description: This class is an introduction to PowerPoint 2.01 for the Macintosh. The student will create a slide show presentation with speaker's notes and audience handouts. The course covers the use of master slides, drawing tools, wordprocessing tools, and slide tools. The student will print a complete presentation.

Objectives: At the completion of this course the student will be able to:
• Create, edit, save, retrieve, and print a slide presentation
• Create a Master slide
• Create an outline for a presentation
• Import and create graphics for slides
• Create speaker's notes and audience handouts

Prerequisites: Introduction to the Macintosh

Length of Course: 6 hrs

Frequency: Bimonthly

Cost: Headquarters General Activities funded.

Excel 3.0 Database   MAC

Description: This course covers the database features of Excel 3.0. The student will create, query, sort, and print a database. The course also includes database functions.

Objectives: At the completion of this course

the student will be able to:
- Create and print a database
- Query a database
- Use database functions in calculations
- Sort a database

Prerequisites: Introduction to Excel 3.0

Length of Course: 3 hrs

Frequency: Quarterly

Cost: Headquarters General Activities funded.

Excel 3.0 Graphics   MAC

Description: This course covers the graphing features of Excel 3.0. The student will create various types of graphs from worksheet data. The course also includes saving, enhancing, and printing graphs.

Objectives: At the completion of this course the student will be able to:
- Create, save, edit, retrieve, and print a graph
- Select from a variety of graph types
- Enhance a graph with text and graphics

Prerequisites: Introduction to Excel 3.0

Length of Course: 3 hrs

Frequency: Quarterly

Cost: Headquarters General Activities funded.

Introduction to Excel 3.0   MAC

Description: This course introduces the student to the concepts and basic uses of Excel 3.0. The student will create, save, edit, and print a worksheet. The course also covers formulas, formatting, data types, and copying.

Objectives: At the completion of this course the student will be able to:
- Create, save, edit, retrieve, and print a

worksheet
- Enter value and label data types in a worksheet
- Create simple formulas to calculate data
- Copy and move data
- Format numeric data

Prerequisites: Introduction to the Macintosh

Length of Course: 6 hrs

Frequency: Monthly

Cost: Headquarters General Activities funded.

Introduction to MacWrite II   MAC

Description: This course is an introduction to MacWrite word processing on the Macintosh. The student will create, save, retrieve, and print a document. The course also covers changing margins, setting tabs and indents, character formatting, headers, footers, and page numbering.

Objectives: At the completion of this course the student will be able to:
- Create, edit, save, retrieve, and print a document
- Change default margins
- Set tabs
- Number pages
- Create headers and footers

Prerequisites: Introduction to the Macintosh

Length of Course: 6 hrs

Frequency: Quarterly

Cost: Headquarters General Activities funded.

MS Word Columns and Tables MAC

Description: This course covers the columns and table features in MS Word as well as advanced tab use and paragraph commands.

The student will create a table and enhance it and use math commands to calculate figures in the table. The student will also add newspaper style columns to a document.

Objectives: At the completion of this course the student will be able to:
• Create newspaper style columns
• Create numeric and text tables
• Set the four different types of tabs
• Calculate columns of numbers in a table

Prerequisites: Introduction to MS Word 4.0

Length of Course: 3 hrs

Frequency: Quarterly

Cost: Headquarters General Activities funded.

Introduction to MS Word 4.0 MAC

Description: This course introduces the student to MS Word 4.0 on the Macintosh. The student will create, save, retrieve, edit, and print a document. The course also includes changing margins, character formatting, setting tabs, headers and footers, and page numbering.

Objectives: At the completion of this course the student will be able to:
• Create, edit, save, retrieve, and print a document
• Change default margins
• Set tabs
• Number pages
• Create headers and footers

Prerequisites: Introduction to the Macintosh

Length of Course: 6 hrs

Frequency: Monthly

Cost: Headquarters General Activities funded.

MS Word Merging   MAC

Description: The course introduces the student to the merge feature of MS Word. The student will create a form letter and merge it with a file of data. They will also use merge commands to select specific records from the data file for a merge. In addition the student will create mailing labels.

Objectives: At the completion of this course the student will be able to:
• Create a data list to use in the merge
• Create a form letter
• Merge a list and a form letter
• Filter specific records in a merge
• Create mailing labels from a data list

Prerequisites: Introduction to MS Word 4.0

Length of Course: 3 hrs

Frequency: Quarterly

Cost: Headquarters General Activities funded.

MS Word Style Sheets   MAC

Description: The course covers formatting styles in MS Word. The student will create, apply, and edit formatting styles and learn the many advantages of styles.

Objectives: At the completion of this course the student will be able to:
• Name 3 reasons to use styles
• Define a style
• Apply a style
• Edit a style

Prerequisites: Introduction to MS Word

Length of Course: 3 hrs

Frequency: Quarterly

Cost: Headquarters General Activities funded.

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SPECIALIZED TRAINING REQUIREMENTS
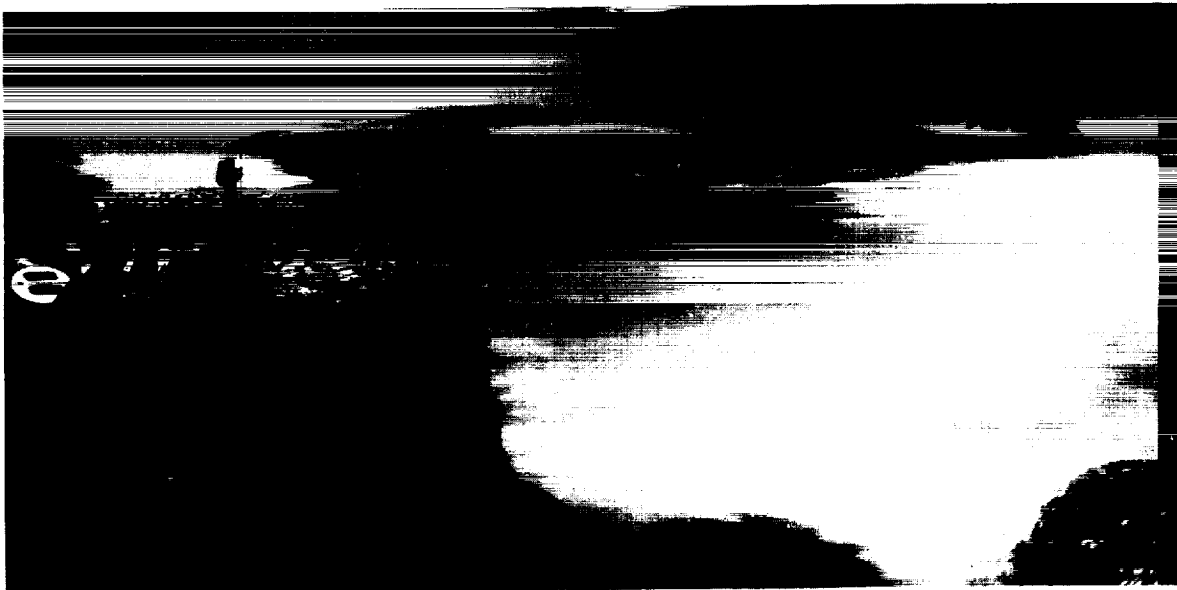
Specialized Training Requirements

Specialized training requirements often occur in at least four areas:
1. Organizational Development
2. Continuous Improvement
3. Diversity or Multi-Cultural Education
4. Technical

While requirements for training in these areas may be scheduled or unscheduled, no firm description for courses offered can be provided. Often the subject matter requires modification or development to specific organizational requirements. Since limited resources are available for these programs, when a need can be defined and is clearly communicated through appropriate management channels, seminars or courses are provided to meet organizational needs.

APPENDICES

Ships of Exploration - Mars

Niña — 1492

Mars Excursion Vehicle — Mars Transfer Vehicle — 21st Century
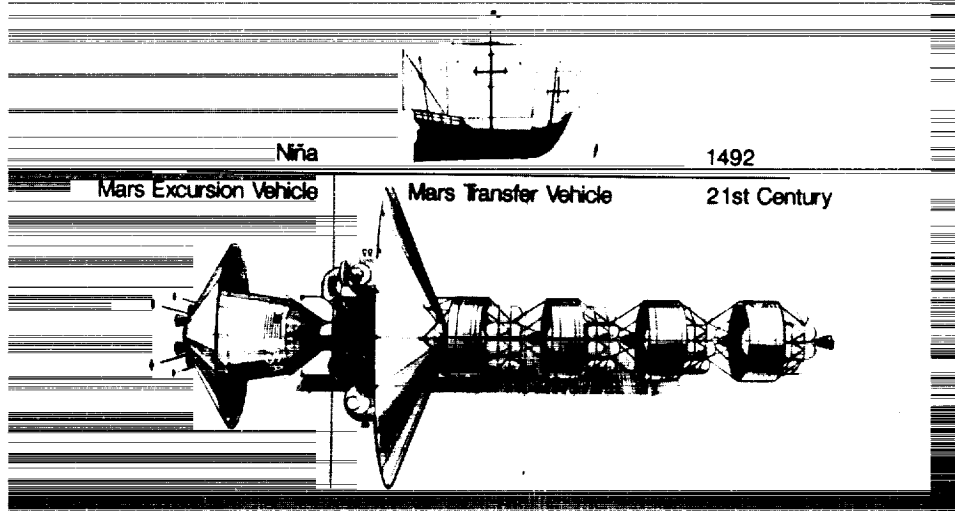
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MANAGEMENT EDUCATION CENTER

The Management Education Center (MEC)

The Management Education Center is part of the Goddard Space Flight Center and is located at Wallops Flight Facility, Wallops Island, Virginia. Wallops Island is approximately 40 miles southeast of Salisbury, Maryland, 150 miles southeast of Greenbelt, Maryland and 160 miles southeast of Washington D.C.

Nearby airports include Washington National Airport and Baltimore/Washington International Airport. From both of these major airports, participants can arrange for a connection directly to Salisbury Airport. Ground transportation is provided for the 40 minute trip from Salisbury Airport to Wallops Flight Facility. (From Dulles International Airport, west-coast participants can take a shuttle bus to Washington National Airport for a flight to Salisbury, if necessary.) Most participants from Langley, Goddard and Headquarters choose to drive to Wallops.

The primary mission of the Wallops Flight Facility (WFF) is to manage and implement NASA's sounding rocket and balloon programs, to conduct observational Earth sciences studies, to provide aircraft and other flight services and to operate a launch range and research airport in support of these other activities.

The Management Education Center (MEC) located at Wallops Island has been established as a result of a need for a systematic, agency-wide effort to develop managerial resources. The Center provides the focal point for management education and other agency-wide development programs. The MEC:

- Offers programs specifically tailored to the needs of NASA managers
- Facilitates programs for the development of specific discipline areas within NASA
- Provides consistent high-quality programs for current and future NASA leaders

The MEC provides a place where NASA can conduct training and conferences in a pleasant environment with few job-related distractions. The MEC consists of a conference facility complete with break-out rooms, a library, recreation rooms and lounges. Participants are housed in one of two dormitories, enjoy a dining hall during their stay, and have use of a post office, gymnasium and many other recreational facilities located both on and off 'campus'.

Telephone Information

For incoming telephone messages or general information:

(804) 824-1469 or
(804) 824-1806

Mail Service

Participants receive their mail at the Management Education Center. All correspondence should be addressed as follows:

Management Education Center, Bldg. E-104
Attn: (Name of Participant)
Wallops Island, VA 23337

Incoming Facsimiles

The Management Education Center FAX number is:

FTS: 889-1942
Commercial: (804) 824-1942

Take US 50E to U.S. 13S at Salisbury.
Take U.S. 13S for about 40 miles to Rt. 175.
Make a left onto Rt. 175 at T's Corner and drive
approximately 5 miles to second crossroad and
make a left (Ocean Deli). Continue down this road
to the main entrance of the facility. The guard will
direct you to Building E-104 where the Conference
Center is located.
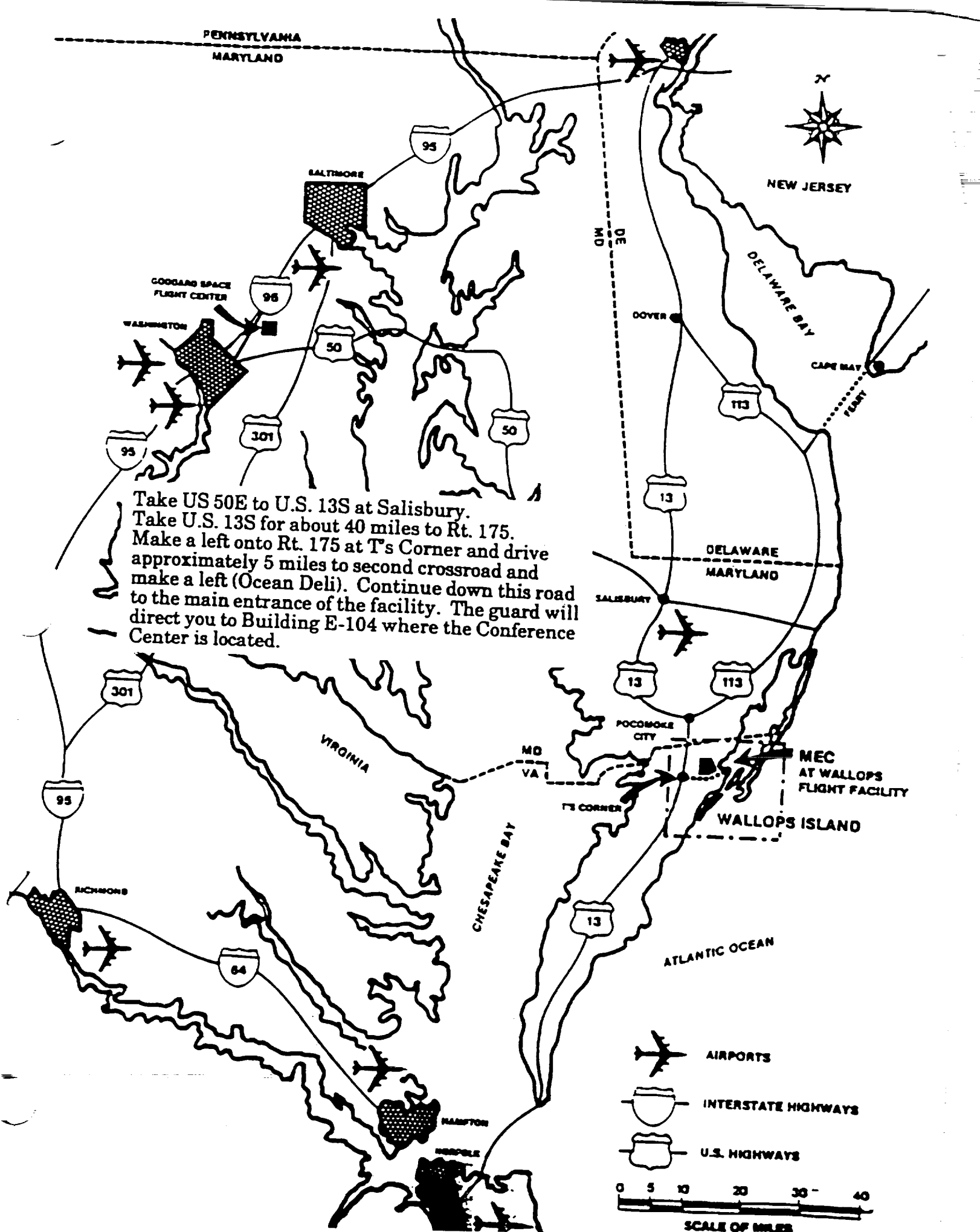
NASA Goddard Space Flight Center
Wallops Flight Facility
Wallops Island, Virginia
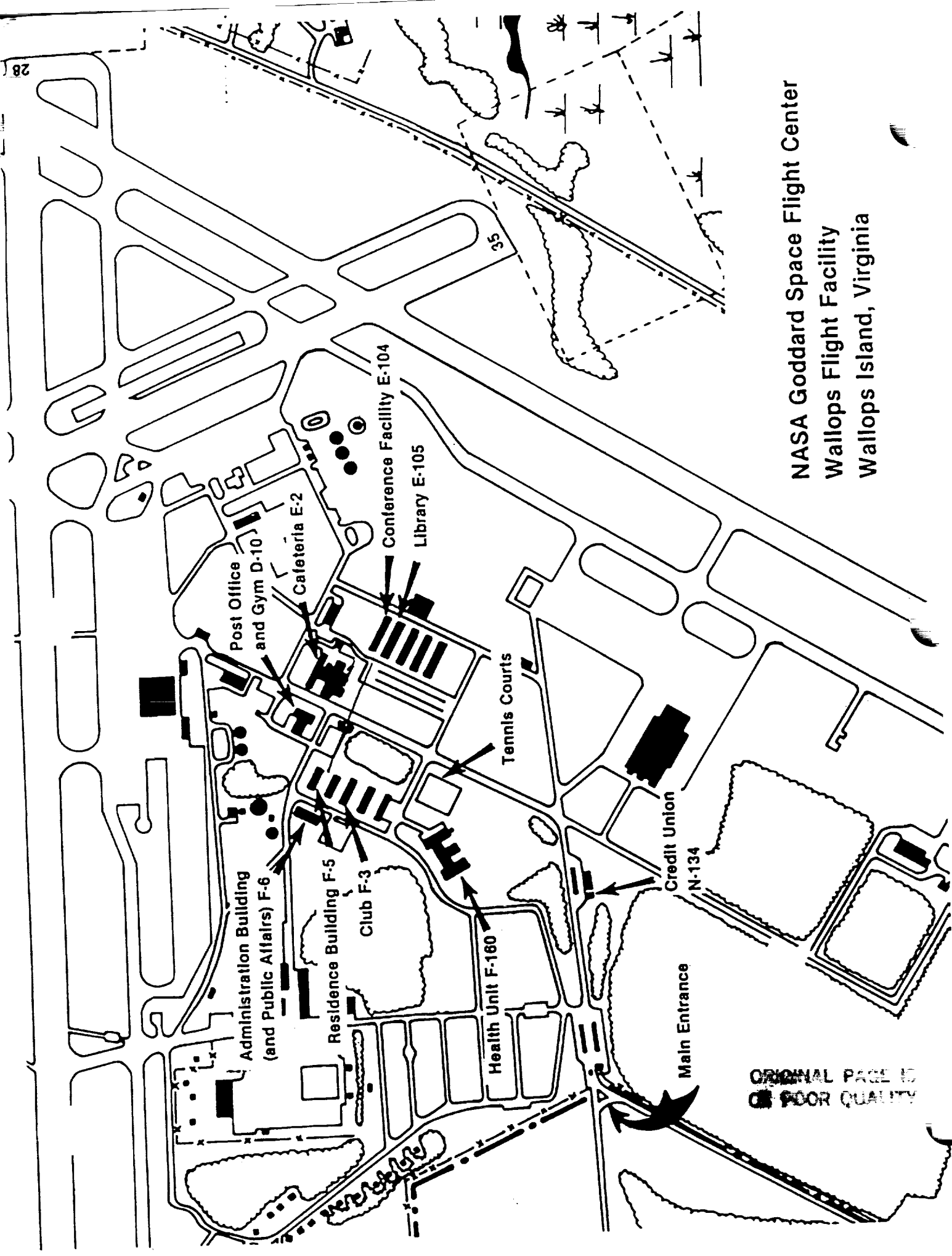
Conference Facility E-104
Library E-105
Cafeteria E-2
Post Office and Gym D-10
Tennis Courts
Administration Building (and Public Affairs) F-6
Residence Building F-5
Club F-3
Health Unit F-180
Credit Union N-134
Main Entrance

28
35

BB.
HQ FORM 56

NASA
National Aeronautics and Space Administration

Request, Authorization, Agreement and Certification of Training

SECTION I—INITIATING OFFICE

NAME OF APPLICANT (Last, First, M.I.)	2. OFFICE CODE OF APPLICANT	3. SOCIAL SECURITY NO.

B TITLE

	5. GRADE & STEP	6. TEL. EXT.

POSITION LEVEL

☐ A. NON-SUPERVISOR ☐ C. MANAGER

☐ B. SUPERVISOR ☐ D. EXECUTIVE

8. NAME OF ORGANIZATION CONDUCTING TRAINING

9. LOCATION OF TRAINING (City & State)

0. PURPOSE OF TRAINING (Enter one item only in code block)

CODE ☐ 1. MISSION OR PROGRAM CHANGE 4. IMPROVE PRESENT PERFORMANCE
2. NEW TECHNOLOGY
3. NEW WORK ASSIGNMENT 5. FUTURE PLANS AND GOALS

11. NAME AND ADDRESS (including ZIP Code) OF ORGANIZATION TO WHICH NASA SHOULD SEND PAYMENT

12. EMPLOYMENT DATES

A. NASA (Month & Year)	B. FEDERAL (Month & Year)

13. COURSE TITLE AND BRIEF DESCRIPTION

CATALOG/COURSE NO.

14. UPWARD MOBILITY CONNECTION (Please indicate if course is part of any of the following)

☐ A. CEP ☐ B. STEP ☐ C. GO ☐ D. NONE

15. SCHEDULED DATES (Mo., day, yr.)		16. NUMBER OF COURSE HOURS		PERSONNEL USE (Codes)
A. FROM	B. TO	A. DURING DUTY	B. NON-DUTY	

17. JUSTIFICATION FOR TRAINING (Explain how training is DIRECTLY or INDIRECTLY related to official duties (present or future) and the benefits to be derived by NASA or the government)

18. ESTIMATED COST OF TRAINING

A. TUITION OR COURSE FEE	B. TRAVEL	C. PER DIEM	D. OTHER (Specify)

SECTION II—RECOMMENDED APPROVALS AND SIGNATURES

NOTICE. - If training is over 80 hours, signature at right (item 19) constitutes an agreement to Continue in Service, per conditions on reverse of Part I. ▶	19. SIGNATURE OF APPLICANT	20. DATE
21. NAME AND TITLE OF IMMEDIATE SUPERVISOR	22. SIGNATURE	23. DATE
24. NAME AND TITLE OF NEXT HIGHER LEVEL SUPERVISOR	25. SIGNATURE	26. DATE
27. NAME OF CODE TRAINING CONTACT	28. SIGNATURE	29. DATE

SECTION III—EMPLOYEE DEVELOPMENT SECTION

30. TRAINING APPROVED ☐ A. YES ☐ B. NO	C. AMOUNT (If Yes)	31. SIGNATURE OF APPROVING OFFICIAL	32. DATE

33. APPROPRIATION OR FUND CHARGEABLE

80_____ 0103 R&PM FY_____ 300 DP2542_____ 459-00_____ IMS 10-01-03

34. DOCUMENT/ PURCHASE ORDER NO. ▶ N A S W O O O O

AUTHORIZING OFFICIAL (Signature)

36. BILLING INSTRUCTIONS (Furnish invoice to):

Fiscal Office (BFH)
Hq. National Aeronautics and Space Administration
Washington, DC 20546

NOTE:—See instructions for completing this form on reverse of part 1. Also see reverse of this part for Privacy Act Notice.

CC.
MEP NOMINATION FORM

C-2

NASA

MANAGEMENT EDUCATION PROGRAM
PARTICIPANT NOMINATION FORM

NOMINEE INFORMATION

Social Security No. _____

Date of Birth _____
Month / Day / Year

Dr. ☐
1. Mr. ☐ _____ Phone (FTS) _____
Ms. ☐ _____(Name)_____

Name to be used on Name Tags _____

2. Organizational Title (of nominee) _____

Position Title _____

Pay Plan _____ Series _____ Grade _____

3. Mailing Address: Code / Division / Office / Center

_____

_____

_____

4. Please check the primary activity of the organization managed by the nominee.

_____ Functional: Technical/Engineering   _____ Program/Project Management

_____ Administrative/Resource Management   _____ Research

5. Number of managers/supervisors reporting to the nominee _____

6. In the space provided below, submit a type-written biographical sketch of the nominee including their organizational title, length of time in current assignment, a brief description of their present managerial assignment stating responsibilities and functions, prior managerial experience and responsibilities, and any other relevant information. (Limit the bio-data to single spaced typing within the box.)

_____ (Name)   _____ (Installation)

7. Brief description of prior managerial experience and responsibilities (most recent first):

DATE   TITLE / ORGANIZATION   GRADE

_____

_____

_____

8. Previous management education program(s) attended:

DATE   PROGRAM

_____

_____

_____

STATEMENT OF ENDORSEMENT

By nominee's immediate manager, evidence of need / ability / potential / etc.:

Typed name, title and address of nominee's immediate manager:

_____

_____

_____

_____

_____

(SIGNATURE / DATE - IMMEDIATE MANAGER)

NOMINATING OFFICIAL'S CONCURRENCE:
(Center Director/Associate Administrator)

_____

(SIGNATURE / DATE)

Original and one copy of the completed nomination form should be forwarded to:
Office of Development, Code NPD
Personnel Programs Division
NASA Headquarters
Washington, DC 20546

WI-1454 (REV. 5-84)

DD.
PPMI NOMINATION FORM

PROGRAM/PROJECT MANAGEMENT INITIATIVE
PARTICIPANT NOMINATION FORM

_ase check the program and insert the session number for this nomination:

___ADVANCED PROJECT MANAGEMENT___   ___PROJECT MANAGEMENT___

___APM FOLLOW-ON   ___PROGRAM MANAGEMENT

___CONSTRUCTION of FACILITIES   ___SOURCE EVALUATION BOARD____
    MANAGEMENT___   (Please complete the attached questionnaire)

___EXECUTIVE PROJECT MANAGEMENT   ___SYSTEMS ENGINEERING___

___PROCUREMENT MANAGEMENT___   ___TASK MANAGEMENT

⊐ DR.
⊐ MR.   FTS Number _____
⊐ MS. _____

        (Name to be used on certificate)   FAX Number _____

NICKNAME: _____

        (Name to be used on name tag)

TITLE AND GRADE: _____

"NTER: _____   MAIL STOP: _____

PRESENT POSITION: _____

YEARS OF PROJECT MANAGEMENT EXPERIENCE: _____

DATE OF BIRTH: _____   SPECIAL DIETARY REQUIREMENTS: _____

_____

_____   _____

(Training Official's Signature)   *(Date)*

IF YOU HAVE ANY QUESTIONS ABOUT THE PROGRAM, CALL:	PLEASE MAIL OR FAX THIS FORM TO:
Berjetta Mays (202)554-8677 **Angella Martin** (202)554-8677	MARY JO SHARP FAX 765-4013 PHONE: 453-8519 **YOUR TRAINING OFFICE**

EE.
NASA FORM 1591

NASA

lional Aeronautics and
ace Administration

Nomination for NASA Development Programs

IOGRAM APPLYING FOR

SECTION I — APPLICANT BIOGRAPHICAL INFORMATION

APPLICANT'S NAME (Last, first, middle initial)	2. SOCIAL SECURITY NO.	3. DATE OF BIRTH	
HOME ADDRESS (Number, Street, City, State, ZIP Code)		5. HOME TELEPHONE NO. (Include Area Code)	
ORGANIZATION MAILING ADDRESS (Include Mail Code/Stop)		7. OFFICE TELEPHONE NO. (FTS)	
. POSITION TITLE	9. PAY PLAN/SERIES/GRADE	10. LENGTH OF SERVICE (No. of years)	
		a. NASA	b. FED. GOV'T.
1. SUPERVISOR'S NAME AND POSITION TITLE		12. SUPERVISOR'S OFFICE PHONE (FTS)	

3.   EDUCATION (Colleges/Universities attended)

INSTITUTION	DISICIPLINE	DEGREE	YEAR

14. OTHER DEVELOPMENT OR TRAINING (List any significant formal or informal training you have attended during the last ten years of Federal Service)

TITLE OF COURSE/PROGRAM	NAME OF ORGANIZATION CONDUCTING TRAINING	DATE ATTENDED	COURSE LENGTH

15. SIGNIFICANT RECOGNITION (e.g., scholarships, honors, awards)

NASA FORM 1591   NOV 86 PREVIOUS EDITIONS ARE OBSOLETE.

16. PUBLICATIONS AND/OR PATENTS

SECTION II — EMPLOYMENT INFORMATION *(To be filled in by applicant)*

17. BRIEF STATEMENT DESCRIBING PRESENT POSITION

18. EMPLOYMENT HISTORY *(List in chronological order beginning with present position and then other principal positions held since entering a professional career)*

DATES	EMPLOYING ORGANIZATION/LOCATION	POSITION TITLE	GRAI

19.   **SIGNIFICANT ACCOMPLISHMENTS DURING RECENT POSITIONS**

a. MANAGERIAL

b. TECHNICAL

20. BRIEF STATEMENT OF THE RELATIONSHIP BETWEEN THIS PROGRAM AND YOUR CAREER GOALS

2.

I. STATE EXPECTED OUTCOME OR OBJECTIVES FOR THE INDIVIDUAL PARTICIPATING IN THIS PROGRAM, INCLUDING SPECIFIC SKILLS AND/OR KNOWLEDGE YOU EXPECT YOUR NOMINEE WILL GAIN

22. INDICATE WHAT YOU BELIEVE TO BE THE NOMINEE'S STRENGTHS, INCLUDING EXAMPLES OF SIGNIFICANT ACCOMPLISHMENTS

3.

SECTION IV – DESIRED DEVELOPMENTAL ASSIGNMENT *(To be completed by nominee's supervisor/manager. This section is to be used for Developmental Work Experience Programs only)*

25. DESCRIBE THE HEADQUARTERS/CENTER EXPERIENCE(S) THAT WOULD BE MOST BENEFICIAL IN TERMS OF PROFESSIONAL AND PERSONAL DEVELOPMENT

    a. TO THE <u>NOMINEE</u>

    b. TO THE SPONSORING ORGANIZATION/AGENCY

26. I RECOMMEND THIS NOMINEE *(Signature of 1st line supervisor)*	27. DATE

SECTION V – REENTRY PLANS *(To be filled in by nominee's organizational manager)*

28. STATE PLANS FOR UTILIZING THE EXPERIENCE AND KNOWLEDGE THAT WILL BE GAINED BY THE NOMINEE AS A RESULT OF PARTICIPATING IN THIS PROGRAM IN TERMS OF PROPOSED ASSIGNMENTS IMMEDIATELY UPON REENTRY

SECTION VI – APPROVALS AND SIGNATURES

29. SIGNATURE OF NOMINEE	30. SIGNATURE OF 2ND LINE MANAGER	31. SIGNATURE OF 3RD LINE MANAGER *(Or Exec. Resources Panel Chairman)*

SECTION VII – EXECUTIVE POSITION MANAGER ENDORSEMENT

32. STATEMENT RECOMMENDING THIS INDIVIDUAL

33. SIGNATURE	34. DATE

4.

FF.
COMPUTER TRAINING CENTER
REGISTRATION FORM
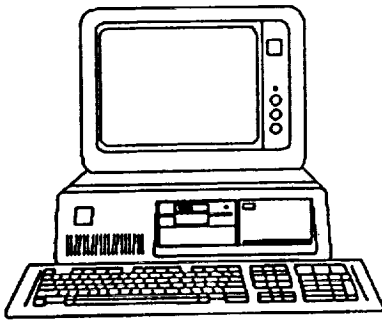
Computer Training Center
Registration Form

Please return this form to the Computer Training Center FTH-1
three working days prior to class.

_____

Name: _____ Code: _____

Social Security Number: _____ Phone: _____

Course: _____ Class Date: _____

Justification: _____
_____
_____
_____
_____
_____
_____
_____

Signature of
Applicant: _____ Date: _____

Important:

This section must be signed by your supervisor and code training contact prior to class.

I understand that space has been provided for this employee in the above noted course and that there
is no charge for attendance. However, if the employee does not attend and fails to cancel at least 24
hours in advance, a monetary penalty of one hundred dollars will be taken from my codes's training
allocation.

Signature of
Supervisor: _____ Date: _____

Signature of
Code Training Contact: _____ Date: _____

GG.
SENIOR EXECUTIVE PROGRAM
PARTICIPANT NOMINATION FORM

NASA

SENIOR EXECUTIVE PROGRAM PARTICIPANT NOMINATION FORM

NOMINEE INFORMATION

Social Security No. _____

Date of Birth _____
Month / Day / Year

Dr. ☐
1. Mr. ☐ _____ Phone (FTS) _____
Ms. ☐   *(Name)*

Name to be used on Name Tags _____

2. Organizational Title (of nominee) _____

Position Title _____

Pay Plan ___SES___ Series _____ ES ___Level___

3. Mailing Address: Code / Division / Office / Center

_____

_____

_____

4. Please check the primary activity of the organization managed by the nominee.

    _____ Functional: Technical/Engineering   _____ Program/Project Management

    _____ Administrative/Resource Management   _____ Research

5. Number of immediate subordinates who report *directly* to the nominee _____

6. Number of managers/supervisors reporting to the nominee _____

7. Total number of NASA employees in the nominee's organization _____

8. In the space provided below, submit a type-written biographical sketch of the nominee including organizational title, length of time in current assignment, a brief description of present managerial assignment stating responsibilities and functions, prior managerial experience and responsibilities, and any other relevant information. (Limit the bio-data to single spaced typing within the box.)

       _____   _____

                   (Name)   **(Installation)**

9. Previous positions held (most recent first):

DATE (Years)   TITLE / ORGANIZATION   GRADE

_____

_____

_____

_____

_____

_____

_____

_____

10. Previous management development program(s) attended:

DATE (Year)   PROGRAM   SPONSOR   LENGTH

_____

_____

_____

_____

_____

_____

Typed name, title and address of nominee's immediate manager:

_____

_____

_____

_____

_____
(SIGNATURE / DATE - IMMEDIATE MANAGER)

NOMINATING OFFICIAL'S CONCURRENCE:
  (Center Director/Associate Administrator)

_____
(SIGNATURE / DATE)

Original and one copy of the completed nomination form should be forwarded to:
Office of Development, Code NPD
Personnel Programs Division
NASA Headquarters
Washington, DC 20546

HH.
EXECUTIVE AND MANAGEMENT
DEVELOPMENT
NOMINATION FORM

NASA

EXECUTIVE AND MANAGEMENT DEVELOPMENT NOMINATION FORM
(FOR OTHER THAN MEP OR SEP)

COURSE TITLE _____

NOMINEE INFORMATION   Social Security No. _____

                             Date of Birth _____
                                              Month / Day / Year

        MR. ☐
1. MS. ☐
        DR. ☐ _____ Phone (FTS) _____
                     (Name)   FAX _____

    Name you like to be called--to be used on Name Tags _____

2. Organization _____

    Position Title _____ Grade _____

    Please check the primary activity of the organization you manage:

        _____ Technical/Engineering   _____ Program/Project Management

        _____ Administrative/Resource Management   _____ Research

Mailing Address: Installation / Mail Code or Stop

_____

Management Education Program and/or Senior Executive Program attended: (if applicable)

PROGRAM DATE   MEP/SEP PROGRAM NUMBER
    (Mo./Yr.)

Previous Executive and Management Development Follow-On Program (s) attended (if applicable):

PROGRAM DATE   FOLLOW-ON TITLE
    (Mo./Yr.)

CONCURRENCE:

_____   _____
(SIGNATURE/DATE - IMMEDIATE MANAGER)   (SIGNATURE/DATE - TRAINING DIRECTOR)

Completed nomination form should be forwarded to:
Office of Human Resources
and Organization Development
Code NHD   Tel. (202) 453-5573
NASA Headquarters   Fax (FTS) 426-2030
Washington, DC 20546

II.
SAMPLE INDIVIDUAL DEVELOPMENT PLAN

INDIVIDUAL DEVELOPMENT PLAN
(Employee Worksheet)

1 Name (Last, First, MI)	2 Current Position	3 Org. Code	4 Supervisor's Name	5 Period Covered (1 year)
Doe, John R.	Program Analyst	950	Smith, Jane	3/1/89–2/28/90

6 Year 1 Developmental Goals
To increase awareness of programs and mission requirements within Code 950 in order to enhance capability as program analyst.

7 Year 2 Developmental Goals
To take on greater responsibilities as a program analyst in Code 950.

8 Year 3 Developmental Goals
To be eligible for senior program analyst in Code 950.

9 DEVELOPMENTAL OBJECTIVES	10 Purpose	11 Priority	12 DESCRIPTION OF PLANNED DEVELOPMENTAL ACTIVITY (And Date For Accomplishment)	13 EVIDENCE OF ACCOMPLISHMENT
Develop greater skill in analyzing programs and evaluating their effectiveness.	Improved performance	Essential	Work with senior analyst to conduct review and evaluation of XYZ project. 4/1 – 6/30.	Developed, implemented and documented guidelines for evaluating XYZ project by 7/31.
To increase awareness of mathematical and statistical tools available for use in quantitative analysis of project data.	Change in state of the art	Needed	Completed training course, Advanced Statistical Methods for Program Analysis by 10/30.	Course requirements completed.
To increase awareness of programs and mission requirements within Code 950.	Meet future need	Helpful	Volunteer to participate on special task force regarding Code 950 mission requirements by 12/1.	Participated in Code 950 task force on mission requirements.

Employee Signature and Date (Optional)	Supervisor Signature and Date (Optional)

JJ.
NASA HEADQUARTERS TRAINING CODE CONTACTS AND CENTER TRAINING DIRECTORS

NASA Headquarters Training Code Contacts and Center Training Directors

NASA Headquarters Training Code Contacts

Code A
Ms. Josephine Soper
453-1009

Code B
Ms. Barbara Warren
453-2262

Code C
Ms. Victoria Thorne
453-5563

Code D
Ms. Marty Stein
453-1125

Code E
Ms. Linda Parish
453-2168

Code F
Ms. Beverly Chavez
453-2879

Code G
Ms. Barbara Webb
453-2456

Code H
Ms. Bonnie Lyons
453-1573

Code I
Ms. Paula Geisz
453-9245

Code J
Ms. Bonnie L. Cleary
453-8189

Code K
Ms. Jacqueline Benjamin
453-2088

Code L
Ms. Anne Ward
453-1083

Code M
Ms. Joyce Johnson
453-1253

Code O
Ms. Andrea Jordan
453-2043

Code P
Ms. Diane Cheatham
453-8371

Code Q
Ms. Dale Moore
453-1934

Code R
Ms. Lucy Baker
453-2712

Ms. Mary-Ellen McGrath
453-2723

Code S
Ms. Debra Carson
453-1622

Code X
Mr. Curtis Shoffner

Center Training Directors

Dr. Mark Beymer
Attn: FT
NASA Headquarters
Washington, DC 20546
FTS: 453-5581
Comm: 202/453-8484
FAX: 426-9401

Ms. Sukie Stanley
Attn: 241-3
Ames Research Center
Moffett Field, CA 94035
FTS: 464-5623
Comm: 415/604-0000
FAX: 464-3622

Ms. Cecilia Cordova
Attn: D-1016
Dryden Flight Research Facility
Edwards, CA 93523-0273
FTS: 961-3266
Comm: 805/258-3266
FAX: 258-3567

Ms. Sharon Jeffers
Attn: BAOO
John C. Stennis Space Center
Stennis Space Center, MS 39529
FTS: 494-2336
Comm: 601/688-2336
FAX: 494-2202

Mr. Wayne Boswell
Attn: 114
Goddard Space Flight Center
Greenbelt, MD 20771
FTS: 888-5026
Comm: 301/286-5026
FAX: 888-2799

Mr. Jack Blum
Attn: 291-105
4800 Oak Grove Drive
Jet Propulsion Laboratory
Pasadena, CA 91109
FTS: 792-3750
Comm: 818/393-4593
FAX: 818/393-4593

Mr. Richard Clapper
Attn: 15-4
21000 Brookpark Rd.
Lewis Research Center
Cleveland, Ohio 44135
FTS: 297-2890
Comm: 216/433-2890
FAX: 297-8851

Mr. Charles Hester
Attn: CM21
Marshall Space Flight Center
Marshall Space Flight Center, AL 35812
FTS: 824-7551
Comm: 205/544-7551
FAX: 824-4809

Dr. Michael Glenn
Attn: 309
Langley Research Center
Hampton, VA 23665
FTS: 928-8555
Comm: 804/864-7899
FAX: 928-7899

Mr. David Dickinson
Attn: PM-TNG
Kennedy Space Center
Kennedy Space Center, FL 32899
FTS: 823-2737
Comm: 407/867-2737
FAX: 823-2217

Ms. Susan Braymer
Attn: AH3
Johnson Space Center
Houston, TX 77058
FTS: 525-5266
Comm: 713/483-5266
FAX: 525-3789

KK.
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